

MACDONALD COLLEGE JOURNAL



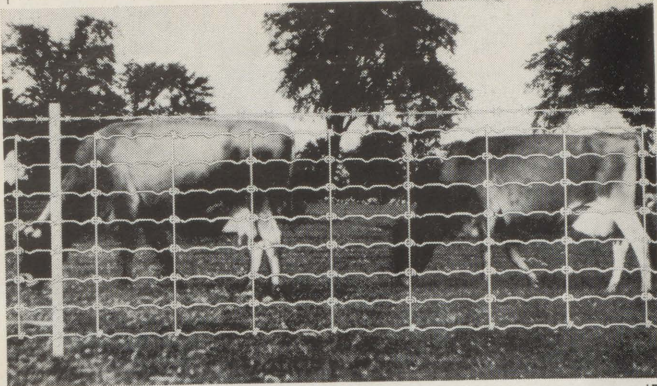
VOLUME 3
No. 11



JULY
1943

Farm · Home · School

FOR SECURITY



Specify "SECURITY" FENCING

You can be sure of the strength, dependability and appearance of "Security" Fencing. Made strictly in accordance with the American Society for Testing Materials Specification A 116, it is scientifically engineered, manufactured and tested. For your own security it pays to insist on "SECURITY" Fencing.



DOMINION STEEL & COAL CORP. LTD.
Security Fence Division

Canada Cement Bldg.

Montreal

HOLD HIGH THE TORCH OF FREEDOM



FARMERS . . . AS IMPORTANT AS ARMOURERS . . .

It may not appear so dramatic to operate a dairy farm, to grow grain or raise bacon as to make planes and steel tanks, but the work of the farmer is just as essential to victory as the work of the armament maker.

Always interested in practical co-operation with farmers, the Bank of Montreal is especially desirous of assisting them *now*.



Talk confidentially with our nearest branch manager respecting your credit needs.

BANK OF MONTREAL

ESTABLISHED 1817

*"a bank where small accounts
are welcome"*

MODERN, EXPERIENCED BANKING SERVICE
. . . the outcome of 125 years' successful operation

ASSETS OVER A BILLION DOLLARS

a Salute to Quality



SINCE 1858

The MACDONALD TOBACCO COMPANY

*Canada's Largest Independent Manufacturers
of Tobaccos and Cigarettes*

THE MACDONALD COLLEGE JOURNAL



This journal is owned, edited,
and published monthly by
Macdonald College.

For advertising rates and
correspondence concerning the
advertising section write to the
Advertising Representative.

BOARD OF MANAGEMENT

Chairman

W. H. BRITAIN, Ph.D.

Circulation Manager

L. H. HAMILTON, M.S.

Business Manager

T. F. WARD

Editor

A. B. WALSH, B.Sc. (Agr.)

Associate Editor

H. R. C. AVISON, M.A.

ADVERTISING REPRESENTATIVE

E. GROSS

6381 De Vimy Ave.

Montreal

Telephone ATlantic 4739

All correspondence concerning
the material appearing in the
MACDONALD COLLEGE JOURNAL
should be addressed to

THE EDITOR,

Macdonald College, P.Q.

Subscription rates — 50c per year

EDITORIAL COMMENT

Science and the Farmer

A suggestion was made in the House of Commons at Ottawa the other day by Gordon Ross, M.P. for Moose Jaw (who, by the way, is a Diploma graduate of Macdonald College) that the Government set up separate research laboratories in the Maritimes, the Central Provinces, the Prairie Provinces and in British Columbia to study agricultural problems. Although no action has been taken on this proposal, it is interesting to note that there is evidently a demand for more scientific research for the benefit of Canadian agriculture.

In this connection it is interesting to examine an analysis of the work of the Federal Department of Agriculture which was made recently by Dr. J. M. Swaine, Director of the Science Service. According to this authority, the work being carried on by the Department of Agriculture is saving the agricultural and forest industries of Canada enormous sums annually in crops and products.

The development of rust-resistant wheats, to which the Division of Botany and Plant Pathology made an essential contribution, working with plant breeders of the Experimental Farms, has removed the danger of huge losses by black stem rust. The provision of control measures against grasshoppers in Western Canada is saving millions of dollars each year. The introduction of large numbers of parasites of the European spruce sawfly into the spruce forests of Canada, where they multiply by the hundreds of millions, is proving a factor in controlling a major threat to our forest wealth. The control of virus diseases of potatoes is of substantial benefit to the industry. Research work on diseases of farm animals and poultry, and the manufacture of veterinary vaccines, sera, etc. are contributions to the notably high health standard of Canadian live stock, while the inspection and quarantine services are a continual help in preventing the introduction of destructive pests and diseases.

Dr. Swaine is of the opinion that in some years, several of these achievements have saved to Canadian agriculture more than the entire cost to the public of Science Service laboratories for the past generation.

And it is not only in the various divisions of the Federal Department of Agriculture that this useful work is being carried on. Right across Canada, in the laboratories and through the services of the Provincial Departments of Agriculture and of the agricultural colleges, scientific knowledge is being brought to bear on problems upon the solution of which much of our progress has depended and will continue to depend.

It is only in comparatively recent years that science in agriculture has demonstrated its importance. Because of the significant contributions the agricultural scientist has made, he is no longer regarded with indifference by farmers. He is more properly regarded as a business co-operator, who performs an essential service in the economical production of food and agricultural products.

The Cover Picture

Our cover picture this month, for the use of which we are indebted to the Canadian National Railways, was taken on the edge of a hayfield somewhere in Prince Edward Island.

The International Food Conference

From a Broadcast by Dr. H. Barton

The International Conference on Food and Agriculture was a Conference of the United and Associated Nations. It was called to consider and report with respect to food needs, their production and distribution in the post-war world.

It was held at Hot Springs, Virginia, one of the largest summer and winter resorts in the United States.

The general approach to the problems involved was on grounds of fundamental considerations, based on factual information. It was not concerned with food production during the war nor with matters of relief.

The final determinations of the Conference took the form of a declaration and recommendations to the Governments and authorities represented.

In the field of nutrition the Conference recognized:

That the first essential of a decent standard of living, is the provision to all men of those primary necessities, which are required to promote freedom from disease, and for the attainment of good health;

That the most fundamental of these necessities is adequate food, which should be placed within the reach of all men, in all lands within the shortest possible time;

That ample evidence has been presented, revealing the existence of malnutrition in every country, with its inevitable consequences of preventable ill health. Diets of Vulnerable Groups, Malnutrition and Disease, Deficiency Diseases, National Nutrition Organizations, Dietary Standards, Exchange of Information and Experiences, and Cooperation of Existing Agencies were all given special attention and covered in the recommendations for increasing food resources and improving diets.

Agricultural production in the post-war period, after extensive examination and review, was divided into:

First, the short-term period, the period of shortages when relief, rehabilitation and post-war production will merge, the duration of which cannot be determined at this time, and when the immediate need will be maintenance food for the population;

Second, the transition period, the period when adjustments and shifts in production will be necessary to establish a more permanent agriculture; and

Third, the long-time period when it is believed the agricultural production order will be, more food and more suitable food for the peoples of the world.

Problems of adjustment, measures for their solution and basic principles were dealt with and a general programme of operation recommended:

That in the immediate post-war period countries whose agriculture has been impaired by enemy action use resources for production of food most needed, governed by calorie production per acre rather than by protective food, economic or technical considerations, and featuring bread

grains and quick maturing crops rather than livestock;

That other countries maintain and increase production if possible where transportation is available;

That in the long-term period countries with impaired agriculture progressively modify short-term practice to insure better nutrition and efficiency of production; stress the production of such foods as milk with decline in grain;

That countries producing more than normal output of required products, progressively adjust to long-term co-ordinated production for the best use of resources on a world scale, based on better diets for their own people and on international demand for nutritionally better food.

It was recognized that such production cannot be expected without fair returns to those undertaking it, and that producers must share fully in improved nutrition and other benefits a better world should provide.

Fundamental to the facilitation and improvement of distribution, in the achievement of freedom from want and an economy of abundance, the Conference put first, international security and collaboration among nations, with full employment of human and material resources, the elimination of discriminatory restrictions and the reduction of all barriers to international trade.

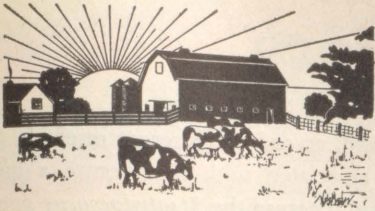
In the Final Act the Conference declared that:

The first task is to complete the winning of the war and to deliver millions of people from hunger and tyranny; that the first steps toward freedom from want of food, must not await the final solution of all other problems, each advance made in one field will strengthen and quicken advance in all others, work already begun must be continued. Once the war has been won decisive steps can be taken. We must make ready now.

To carry forward the work of the Conference it was recommended that an International Commission be established to meet in Washington on July 15 with the responsibility of formulating and recommending to each member government and authority, plans for implementing the Conference recommendations, including a permanent organization in the field of food and agriculture.

The President of the United States and the Prime Minister of Canada have already associated themselves with the declaration of the Conference that every nation should assume the responsibility in collaboration with others of providing adequate food for its own people.

Through the Conference at Hot Springs food and agriculture were given first place in post-war national and international affairs. Never before have they had such recognition. Never before has it been so clearly and widely established that better diets and improved agriculture are so fundamental to the well-being of all people, and never before have the problems of world distribution of food been internationally explored with such scope.



AGRICULTURE

Articles on problems of the farm

Fall Rye is Useful for Autumn Pasture

by R. Summerby

Our long winters make it necessary to devote a good deal of our attention and effort in summer to the production of winter feed. Pastures, on the other hand, are much cheaper to produce, particularly from the standpoint of labour, and anything that can be done to lengthen the pasture season is very helpful.

Normally there is an abundance of pasture in the spring and early summer. During the summer and fall months, growth is less abundant, although it depends largely on the rainfall and its distribution. During this period feed must be provided by the aftermath of meadows, by supplementary crops, and, to a limited extent, by the fall growth on other areas, for little growth takes place as the cool weather of September and October comes on, and pasturage is often very short.

Under suitable conditions, fall rye may help to meet this situation. Fall rye grows well all through September, and continues to grow well on to the latter part of October at a reducing rate. Being an autumn sown crop, it produces leaves and tillers in enormous numbers, but never produces stems and heads as do our spring sown grains. Being made up almost entirely of leaves, the feed produced is very high in protein, seldom being lower than twenty percent and occasionally going well over twenty-five per cent protein. It is thus quite high in feeding value. As regards yield, under good conditions at Macdonald College yields of one and two thirds tons of material with similar moisture content to stored hay have been obtained. Ordinarily a good yield would probably be in the vicinity of one and one eighth tons, while

average yields might be expected to run between eight and nine tenths of a ton.

Good land preparation is necessary

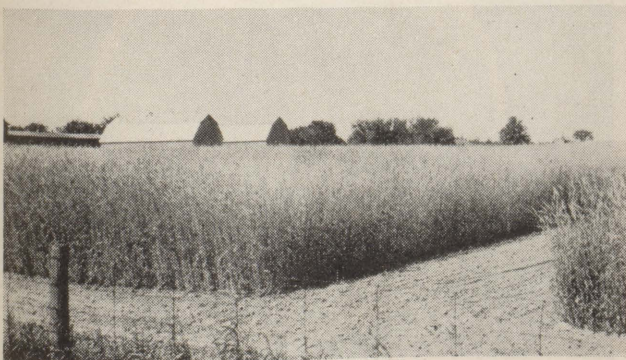
To give satisfactory results, it is necessary that the crop be seeded early, that the seed bed be well prepared, and that the land be well drained and fertile. Seeding should take place before the tenth of August, if best results are to be attained. While seeding any time during the first week of September will give excellent yields of grain, when grown for fall pasture, the yields fall off quite rapidly if seeded after August 20th, and the best results cannot be expected.

The necessity of seeding in August is a serious handicap to its use, for this requires that plans be made ahead of time to provide for the area and to prepare the land.

Probably the best place to seed rye is on land that has been cultivated through the spring or summer to kill such weeds as couch grass or that for some other reason has not been sown. Fall rye may also be sown after a crop of grain that has been harvested for hay, after a crop of barley or early oats that has been harvested early, after a crop of canning peas where these are grown, and after a sod that has been ploughed in early summer and well worked down. To seed to fall rye after any of these crops, it is necessary to plough the land as soon as the crop is off and to work it into a good seed bed. This preparation should be far enough ahead of seeding to allow the soil to settle and to have good moisture conditions for growth.

To produce a good crop of grass rye requires good fertility. Especially if a crop has been grown on the land in the year of seeding, it requires a fair supply of fertilizers or manure. A 2-12-6 mixture applied at the rate of 250 lbs. per acre is suggested.

The largest yield will be obtained if the pasturing is delayed until quite late in the season, but it will probably prove more useful if the pasturing starts late in September or early October. As with other pastures, care should be taken to avoid puddling when the land is wet.



Fall rye seeded the first week of September, 5½ feet high in June.

(Continued on page 7)

Clean Milk and Victory

A Challenge to Producers

by F. S. Thatcher

Have you ever thought what a pile of six million pounds of bad cheese would look like? That is the amount which specialists most familiar with the cheese industry tell us will be spoiled or of poor quality if Canada reaches her cheese objective of two hundred million pounds this year.

Why is that cheese going to spoil? Is it the fault of the factories? Only very little wastage can be charged to that cause. Are the shippers or the storage facilities at fault? No, sir! What is the cause of spoilage, then? Well—cheese spoils or is of poor quality chiefly because (a) it contains harmful types of bacteria in too large numbers or, (b) the milk used to make it contained too many of the undesirable bacteria at some point in its processing. In other words, the milk itself was not "clean" and that can only be scored against the producer, namely, the farmer.

Now, the farmer didn't put those germs in the milk deliberately, but dirty milk, that is, milk with a high bacterial count, nearly always results from one or more faulty practices among the many operations involved in its production, and it is just as important to have clean milk whether it is to be made into cheese, used for butter making or for any other food purpose.

Bacteria are able to bring about many different changes in milk, such as the familiar souring, curdling, off-flavours or colour changes. They may interfere with proper curdling or produce gassiness, poor texture, discolorations and a variety of diseases" in cheese. Poor quality milk and cream mean lower prices, reduced sales, direct loss through spoilage and, in time, a poor reputation as a producer, not to mention plenty of grievances from the consumer.

To the consumer public, the health point of view makes the greatest appeal. Milk is not only a first class food for young animals and an important factor in the human diet, but it is also a first class food for many disease germs. In the past many epidemics have been traced to contaminated milk, and to avoid any further outbreaks a host of regulations have been made which milk producers are supposed to follow.

Milk borne diseases

The principal diseases that may be spread by milk on this continent can be divided into two groups: one where the disease germs come direct from the cow, and the other where the germs get into the milk after it has left the cow, introduced by man. The best known disease in the first group is tuberculosis. Another is undulant fever which in the cow causes the disease known as contagious abortion. (You probably remember that the press recently stated that Edsel Ford died during an attack of undulant fever). The *Streptococcus* germs causing mastitis in cows may give rise

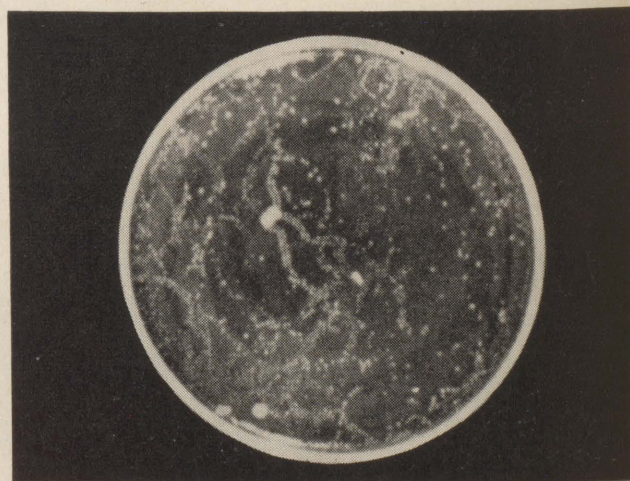
to severe sore throats and, according to recent research, the *Staphylococcus* germs associated with them cause a good deal of "food poisoning" because the *Staphylococcus* germs when they multiply in the milk are able to form poisons which are not destroyed by pasteurization.

The second group of diseases spread by milk and which come from man include typhoid and paratyphoid fevers, various forms of intestinal upsets (particularly diarrhoea in children) septic sore throat, scarlet fever and diphtheria. The germs causing these diseases usually get into the milk from someone handling it who is suffering from the disease or who is a "carrier", that is, he is infected by the germs but does not himself develop the serious symptoms of the disease. Carelessness in handwashing and general hygiene or inadequate toilet facilities all increase the possibility of contamination.

The public, then, has a right to demand clean milk from a health point of view, and the conscientious producer is contributing in no small part to the improvement of health in our nation as well as deserving the higher returns which a higher quality product should earn.

Where do the germs come from?

Everyone who uses a microscope quickly learns that bacteria or germs abound practically everywhere. The tiniest particle of dust invariably carries a large number. A single fly may carry a million: manure may contain hundreds of millions in one gram (about one-twenty-fifth of an ounce). Even larger numbers may be in the dust that a curry comb removes from the coat of a cow. Yes, germs are that small! Many millions may lurk in the grease-film that may develop in a crack at the bottom of a milk can or on separator parts. No wonder, then, that scrupulous care must be exercised if clean milk is to be produced.



A fly was allowed to crawl over this Petri plate for one minute. Wherever it stepped a colony of bacteria is growing.

Steps in Producing Clean Milk

Let's go through the many steps in the farmer's milking operations and see just where the germs are most likely to get into the milk; we'll start with the barn and milk room. By law, the latter must be completely separate from live-stock, and all buildings should be so built that they can be easily cleaned, so that dust can be kept down. All farmers know that if feeding is done at least an hour before or after milking there is much less dust, and hence fewer germs, in the air at milking time. This is particularly important when milking is done by hand. For the same reason brushing and currying should not be done just before milking.

The cow herself is one of the chief sources of contamination. Particular care should be taken to prevent particles of dust, dirt or manure, hairs, or water droplets from dropping from the cow into the milk, since these are some of the worst sources of bacteria, especially of the more objectionable kind. The cow's coat should be kept clean by brushing; clean bedding is essential. Just before milking, the cow's flanks, udder and parts of the legs near the udder should be thoroughly wiped with a clean cloth moistened in a disinfectant solution, and dried with another clean cloth. Remember, too, that the first few squirts from each teat usually contain many bacteria because they are able to multiply in the residual milk left in the teat canal. Do not let this fore-milk get into the main supply.

Next, the milker. He should wash his hands thoroughly before starting to milk, preferably in a disinfectant solution, and should *not* dry his hands by wiping them on his overalls or on a dirty towel. Hands, which are always touching objects which are heavily contaminated with objectionable bacteria are a possible source not only of spoilage bacteria but also of disease. This may sound "sissy" stuff to some hired men, but milking with dirty hands is dangerous. Wearing dirty clothes to milk in is dangerous too. Spitting on the hands before starting to milk should not be tolerated — the saliva may contain many harmful germs — but I've seen it done! "Wet milking" must also be avoided since it helps to spread mastitis in the herd besides contaminating the milk.

Equipment Must Be Clean

Machine milking, if the equipment is properly cared for, is generally much to be preferred to hand milking, and can be a big factor in increasing production in spite of labour shortage. Where hand milking is done, pails with narrow openings give cleaner milk, for fewer hairs and dust particles are apt to fall into the milk. If any large lump of dirt should fall into the pail, that milk should be kept separate from the rest.

When milking machines are used the utmost care must be taken to keep all parts clean. If the milking apparatus is not carefully used, washed, sterilized and hygienically stored it readily harbours enormous numbers of bacteria.

Sterilization means the destruction of *all* bacteria. This may be done by heat treatment or by the use of chemicals. A widely recommended procedure is as follows:

1. Wash thoroughly by drawing at least a gallon of clean, cold water through each unit by suction.

2. Repeat, using a similar quantity of scalding-hot water to which has been added dairy cleanser as recommended by the maker. All pails should be thoroughly washed with both hot and cold water. A second hot water treatment without cleanser is sometimes desirable in hot weather.

3. Immerse the apparatus in a disinfectant solution composed of some commercial chlorine compound such as hypochlorite or chloramine used as directed by the makers. Be sure that no air-pockets are allowed to develop in the hose line and keep the solution up to strength.

4. Drain and dry, taking care to protect all apparatus from flies. A rack exposed to the sun but protected by fly-screens is often recommended. A bulletin may be had from the Department of Agriculture, Ottawa, which gives detailed instructions on the sterilization of milking machines.

Milk, while being taken from the barn, should always be carried in a covered container. This will keep out dust and dirt and, what is more important, flies. Flies love filth and filth breeds germs. What is the use of clean habits in the home if the milk used has already given a bath to a fly straight from a manure pile or a dirty toilet? Every possible means should be taken to keep down flies in the dairy barn and the milk room.

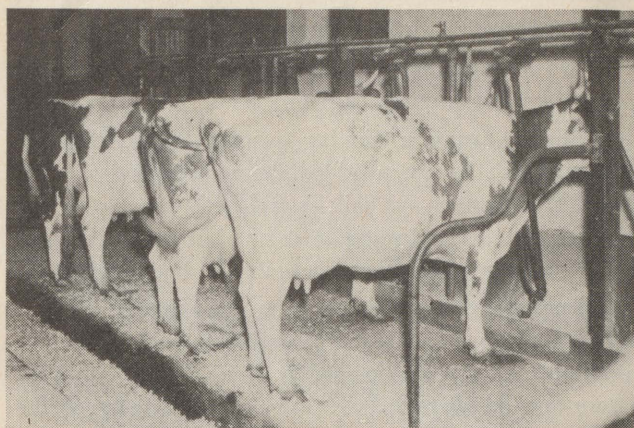
In many dairies the worst contamination with spoilage bacteria comes from improperly sterilized strainers, cans, and other equipment. Clean milk is no longer clean if it is poured through a dirty strainer or into a dirty separator or can. Keep flies away from this equipment and, particularly, keep flies out of the strainers! Every "fly-spot" contains huge numbers of bacteria and the bodies of the flies also may carry millions. When a first-class dairy was temporarily having trouble in producing its usual high quality milk I counted up to forty drowned flies in the strainers. Every bit of milk poured over them added many harmful bacteria to the contents of the cans. The commercial type of strainer is best. Straining through cotton pads or cheese cloth merely helps to break up the larger particles and does not keep out any bacteria. Indeed, if a strainer-cloth were not sterilized immediately after being used it might well *add* many bacteria. The generous use of scalding-hot water and chlorine-containing washes is always necessary for dairy equipment where a steamline is not available.

Cooling

Rapid cooling is essential for the production of good quality milk, because on the temperature of the milk depends the rate of growth of the bacteria. There are always some bacteria even in the cleanest milk. In warm milk each bacterium can divide into two every 20 or 30 minutes. Exceptionally clean milk might be expected to have

CLEAN MILK...

(Continued from page 5)



Absolute cleanliness of animals and their surroundings is essential to the production of clean milk.

at least 1000 bacteria in each cubic centimetre. In eight hours at summer temperature the numbers might reach 30,000,000. Bacteria grow much more slowly at lower temperatures and that is why cool milk "keeps" better.

Experiments have shown that milk having about 4000 bacteria per c.c. at the start would show very little change in 24 hours if kept at 40°F. If held at 50° the numbers would rise to about 12,000; at 60°, to 11½ millions. These figures point out clearly that milk should be cooled to 50° or lower as quickly as possible. This fact cannot be stressed too much. Some producers tend to be careless about cooling when the milk is to be pasteurized later. This is dangerous. If certain *Staphylococcus* forms are present in the uncooled milk they will produce poisons which will remain in the pasteurized milk, even though pasteurizing kills the cells of the *Staphylococcus*.

Space does not permit a discussion in this article of pasteurization, but all evidence is overwhelmingly in favour of it, particularly of whole milk, both from the point of view of keeping quality and the health of the consumer.

Remember — a barn is not just a place for cows to live in — it is a place where urgently-needed food is being produced, and every effort to produce clean milk, and hence, good butter and cheese, is a direct and definite contribution to the national war effort.

The Seed Growers Meet In Charlottetown

The Canadian Seed Growers' Association held its annual meeting in June, at Charlottetown, Prince Edward Island. There was a special significance to this meeting as it was held in the home province of Sir William Macdonald, one of the two men who early in the century, through the Boys' and Girls' Seed Selection Competitions, laid the foundation of what developed into the Canadian Seed Growers' Association.

St. Dunstan's College was the home of the convention. In the quiet halls of this institution the seed growers were comfortably housed, well cared for and made to feel most welcome.

Here seed producers, plant breeders, plant pathologists, extension agriculturists, and seed inspectors gathered together to study the many problems of maintaining a supply of good seed in this country. Not only was registered seed in general the subject of study but, of necessity, special attention was given to the production in Canada of supplies of seed which, previous to the war, were obtained from other countries.

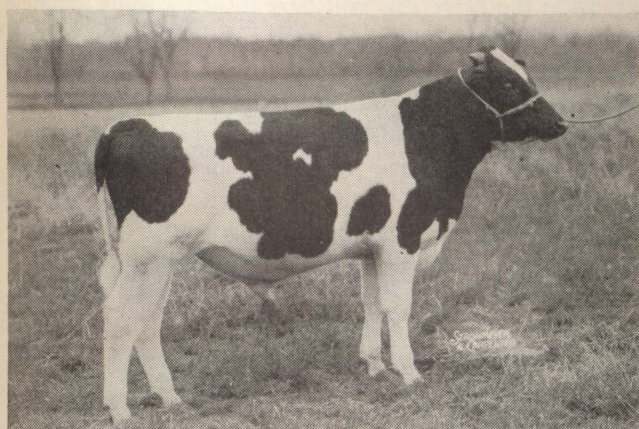
For several years Canada has been producing good stocks of some vegetables. The present conditions have brought about a rapid expansion not only of the production of the seeds which were already being produced, but also of the seeds which formerly came from Europe. This expansion involves establishing good stocks of really desirable varieties, organization so that the fields can be sufficiently isolated that the stocks can be kept uniform, and the keeping up of sufficiently large supplies even

when the number of experienced growers is limited. If all these conditions can be met satisfactorily, then after the war Canada can remain a country producing good vegetable seeds not only for its own use but also for sale on the world's markets. On the other hand, if we have only mass production without due appreciation for the quality, then there is no permanence to this industry.

The development in the production of swede and mangold seed serves as an example. This production was on a sound basis before the outbreak of the war, and, in spite of rapid expansion, was kept on that basis. Good stocks were available, and a good technique was established and followed. Growers of these crops over the country could obtain the seed in small packages properly labelled and sealed. There was a demand for such products in spite of a higher price, because with such seed the farmer had some assurance of having good varieties, genuineness both as to kind of crop and variety and, of course, that the seed would grow.

If the purchaser of seed of any crop, grain, corn, forage crops, roots and vegetables will insist upon the qualities mentioned, then the production of registered seed in Canada will be permanent and the standards for seeds in general will be forced to improve. On the other hand if the producers of crops are satisfied to take a chance as long as the seed is sold cheaply the competition in the seed trade for lower prices will of necessity lower the quality of seeds.

Promising Young Sire Goes to Levis County



The Holstein bull, Macdonald Rag Apple Count, comes from a good milking and a high butter fat family. He is a member of the Oleana family that has been in the Macdonald College herd for many years. His dam, Macdonald Oleana Princess, is only a young cow and as a two year old produced 11,751 lbs. of milk, 476 lbs. of butter fat, with 4.05% test, on twice a day milking. His maternal grand dam, Macdonald Oleana Supreme, has been on the R.O.P. continually in the Macdonald College herd. In her present lactation, she has produced as high as 98 lbs. of milk in one day. Her total milk production in her present lactation in four and one-half months is 10,025 lbs. of milk. The following are her R.O.P. records:

	<i>Pounds of Milk</i>	<i>Pounds of B.F.</i>	<i>% B.F.</i>		
2 yr. old	13,305	548	4.12	365 days	2 milkings
3 yr. old	22,241	976	4.39	365 days	3 "
4 yr. old	11,197	456	4.07	305 days	2 "
Mature	19,323	727	3.76	365 days	3 "
Mature	18,080	694	3.84	305 days	3 "

His maternal great grand dam, Macdonald Dekol Oleana 2nd, made the following R.O.P. records:

	<i>Pounds of Milk</i>	<i>Pounds of B.F.</i>	<i>% B.F.</i>		
3 yr. old	11,914	491	4.12	305 days	2 milkings
4 yr. old	12,523	464	3.71	305 days	2 "
Mature	13,388	524	3.91	365 days	2 "
Mature	14,402	604	4.19	305 days	2 "
Mature	15,545	594	3.82	365 days	2 "

On the sire's side, high butter fat is also very much in evidence. The sire of Macdonald Rag Apple Count is Montvic Rag Apple Trojan by Raymondale Ideal Successor and out of a daughter of Montvic Pathfinder, named Montvic Bonheur Colleen. Montvic Bonheur Colleen made a two year old record of 14,781 lbs. of milk, testing 4.5% butter fat and her three year old record tested 4.68% butter fat.

FALL RYE...

(Continued from page 3)

While little work has been done in eastern Canada to determine the best variety for this purpose, the variety Horton, developed at Macdonald College, has been found satisfactory in trials that have been made. Six pecks per acre are recommended, following similar practices to those that are found best for the seeding of spring grains.

If the crop is not needed for pasture, fall rye can, of course, be allowed to go through the winter for it is seldom winterkilled. It produces very rapid growth very early in the spring, when it can be used for early pasture, or it can be allowed to produce grain, of which it gives excellent yields. When it is intended for either pasture or grain in the spring, it should be seeded in late August or early September.

Fall rye is not a cure-all that will provide for late fall pasture under all conditions, but it is the belief of the writer that by proper planning and handling it will prove to be a useful crop on many farms.

IDENTIFICATION

for
CATTLE, SHEEP, HOGS,
FOXES, POULTRY
(Live and Dressed)

Write for catalogue

KETCHUM MFG. CO. LTD.
Box 361, Dept. 10, Ottawa.

RESEARCH IS THE KEY TO KNOWLEDGE

→ **CEROGRAS** ←
Natural Green Feed

GREENMELK COMPANY LIMITED, WALLACEBURG, ONT.

Buy
War Savings
Stamps

Curing Binder Troubles

by L. G. Heimpel

While the grain binder is a machine of many parts, some of which may at times give trouble, this article will deal only with the knotter or tying mechanism of the binder. In order to understand the instructions given in this article, the binder user should be familiar with the parts discussed; this will enable him to follow through more clearly the instructions given in connection with the various types of troubles met in binder operation.

In the first place, see that the binding part is correctly threaded; then depress the trip arm and turn the discharge arms through one revolution, doing this slowly and watching the action of the needle. The needle will be found to place one end of the twine in a notch in the twine disc. (In the Massey-Harris binder this part consists of a "breast wheel" or ring gear with notches in a flange on top of the gear.) The needle then goes back to its position of rest with the twine stretching from the point of the needle to the twine disc ready for grain to be deposited on the twine. Next, grasp the twine midway between the needle and the knotter and draw about 2 feet of twine from the needle, hooking one hand into this loop below and in front of the knotter. Trip the knotter again and slowly turn the discharge arms, carefully watching the needle as it comes up. It will be found to place the second cord of the twine into the twine disc, and before the needle

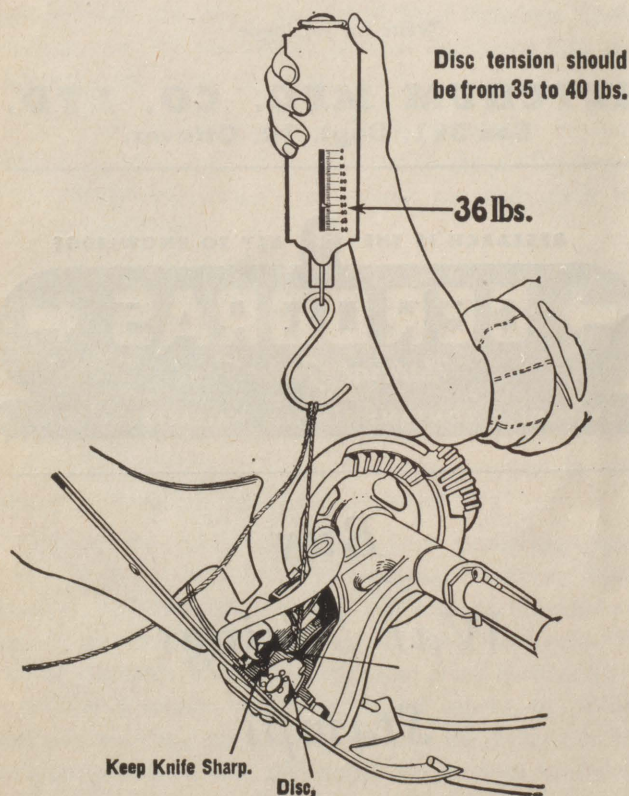
goes back, the twine disc will have turned a short distance drawing the twine under the clamp called the twine holder, ready for the bill hooks to make the knot. Turning the discharge arms a little farther in their rotation will start the needle backward and will also start the bills revolving in their job of tying the knot. It should be remembered that the loop of twine held in the hand is filled tightly with grain when the binder is working, so that part of the cord or twine needed to make the knot must be drawn from the twine disc or holder. When a binder has been standing for a year the bill hooks and twine holder parts sometimes become slightly rusty, and grip the twine more tightly than they will after the rust has been worn off. For this reason, tests of twine tension with a scale should not be made until after the binder has been used for some time in the field.

It is a good idea to make the machine tie several knots while this action is being studied. In making the knots the bills will be seen to make almost a complete revolution with the bills open, then the moveable bill closes on the twine holding the ends tightly. Turning the discharge arms a little farther will start the knife moving forward to cut the twine. In some binders the knot is then forced off the bills by means of a stripper while in others the bills are inclined at such an angle that the stripper is not necessary, the knot being pulled off the bills by the weight of the bundle under the kick of the discharge arms. The Deering binder, for instance, has a stripper, while the Massey-Harris has none. If the discharge arms are now pulled up into their position of rest, the needle will be found to be back in place with the point just above the deck and one cord will be gripped in the twine holder, ready for the next bundle.

How Troubles Develop

The knotter of a new binder is usually so adjusted that it does perfect work. Sometimes no troubles develop in the knotter for several years, and when it does occur it is likely to be due to natural wear of the bill hooks or the twine disc. Or, the springs which supply the necessary tension on the twine holder, the bill hooks or the knife have become somewhat more flexible than they were when new. Therefore, when a binder begins to miss bundles it is usually safe to conclude that, to correct the trouble, it is likely that some adjustment will have to be made to compensate for natural wear in these important binding parts.

The important thing to remember when trouble does develop is not to attack the binding part in a hit-and-miss fashion with a wrench, because adjusting the wrong part will likely aggravate and complicate the trouble already existing. The best method of diagnosing the cause of knotter troubles is through examination of the band of the



bundles that have been missed.

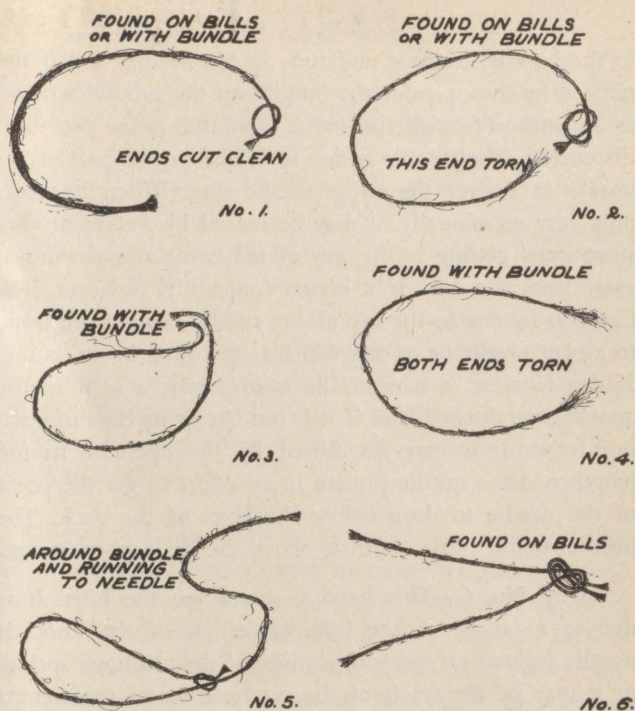
When a binder begins to miss bundles with more or less regularity, the thing to do is to examine carefully the bands of these bundles and compare them with the accompanying drawing. Each of the bands in this drawing has definite characteristics which can be recognized if carefully examined, and from them it is not difficult to judge what should be done with the knotter in order to correct the trouble.

Band No. 1—This band may be found clinging to the bill hooks with the free end cut off square or it may be found with the bundle. In the former case the twine disc is too loose and the tension at the twine can is too tight. It is likely caused by some wear of the twine disc and by an effort on the part of the operator to make a tighter bundle by tightening the twine tension at the can. To correct it, first, loosen the twine tension or make sure that it is right. If the trouble still persists, tighten the twine disc spring just a little. A quarter turn of the nut or stud is usually plenty. The tightness of the bundle being tied, it must be remembered, is controlled by the tension of the trip spring of the binding part, never by the tension on the twine.

If Band No. 1 is found with the bundle it is usually found on bundles which seem to be tied correctly, but will open when the stoker picks them up. The remedy is to tighten the twine disc or twine holder spring, as before stated.

Band No. 2—This band is much like No. 1, but it will be noticed that the end of the band is torn off while that in No. 1 is cut off clean. This is caused by having the twine tension at the can too tight and also too tight a twine disc. The disc is so tight that the twine is crushed and weakened so that the needle when coming forward to deliver the twine to the disc pulls it in two at the disc since it could not get it from the can on account of the excess tension there. When due to the above causes it is usually found on the bills. It may, however, be found with the bundle. In this case it is due to too tight a disc spring adjustment. It is a case of the bill hooks tearing the twine off at the disc in their effort to get enough twine for the knot. Loosen the disc spring. If this band is found with the bundle the twine tension is not likely to be at fault.

At the beginning of the cutting season a few missed bundles of this type may be due to rusty twine holder parts. If so, a little oil on the twine holder will help to remove the rust and brighten the parts. It should be remembered that if the adjustment on a twine holder spring has not been changed from one year to the next, it is not likely that trouble of this kind is likely to be due to too tight a twine holder. This trouble may, however, be expected after adjusting the twine holder spring too tightly.



Band No. 3—This band is found with the bundle. Both ends of the twine are cut off clean and the ends are crimped, showing that the knot had not been completed. This is usually due to bill hook spring being too loose. Where the trouble occurs suddenly it may be caused by grain material or straw having become packed between the bill hooks. In this case, remove the foreign material before making adjustments.

Tighten the bill hook tension spring a quarter turn and note results. Sometimes this trouble is due to wear on the underside of the moveable bill, the hump of this bill having been partially worn away by the twine. The remedy in this case is to put on a new bill hook, or temporary improvement may usually be made by filing a notch behind the hump of the upper bill with a rat-tail file. Smooth the surface of the bill carefully with emery cloth before using the machine again. A bent knife arm also has been known to cause this trouble, in which case the twine will be cut off too close to the bills.

Band No. 4—This band is found with the bundle and both ends of the twine show that the band has been torn off, not cut. It is the result of an altogether too tight adjustment of the twine holder spring. It usually follows an inexperienced operator's effort at adjusting this part. Never change the adjustment more than a quarter of a turn at a time. The remedy is to loosen the twine holder adjustment, and if Band No. 2 appears loosen the twine holder spring a bit more.

Band No. 5—In this case the band is found adhering

(Continued from page 9)

to the bundle, but one end runs to the needle, and if not noticed by the operator the bundle on the ground will act as an anchor to pull the twine from the twine can until discovered. The trouble is due to failure on the part of the needle to deliver the twine to the disc. When it occurs only very occasionally, it may be caused by weeds, or very stout straw getting in the way of the twine and pushing it away from the disc. If it occurs frequently, however, it is likely to be due to the eye of the needle being worn back, to a bent needle or to one which is too slow in its timing. If due to wear, a new needle is necessary, a bent needle may be straightened, and if it is too late in its time of coming forward, it may be caused by the operator having lengthened the needle pitman in an effort to get the point of the needle to drop below the level of the deck. The needle should project a little above the deck when at rest.

Band No. 6—This band is found on the bills. It is due to a failure of the bills to let go of the knot. It usually follows excessive tightening of the bill hook spring, or it may be the result of the combination of too tight a bill spring plus rust on the bills. In binders having a stripper arm it may be caused by the tying of very loose bundles, in which case the stripper pulls the twine from

below the breast plate rather than from the bills. In either case the remedy includes loosening of the bill spring; a machine may have to be made to tie tighter bundles, which must always be done by tightening the tension on the trip spring. This is the coil spring about 6 inches long which bears against the lever which must be depressed to start the binding part in motion. To increase the size of a bundle the space between the needle and the trip arm must be increased. To make the binder tie tighter bundles simply increase the tension of the trip spring by screwing down the thumb nut provided for this purpose.

After a binder has been started to work in cutting the year's crop, it is a good idea to make some checks on the tension of the twine from the can, and also on the tension of the twine holder by measuring the tension with a small spring scale. Tie a loop in the end of the twine, hook the spring scale into the loop and pull the twine from the eye of the needle. It should take from 6 to 8 pounds to pull the twine from the can in this way. Next, tie a loop in the twine behind the twine holder and try to pull the twine from the holder with the scale in the same direction as the bill hooks pull the twine from the holder. If the amount of pull required here is from 35 to 38 pounds the knotter should work perfectly. If it is less than 35 pounds the tension on the twine holder spring should be somewhat increased.

EMERGENCY FEEDING PROGRAM FOR POULTRY

<i>Class of Stock</i>	<i>Range</i>	<i>Cereals</i>	<i>Animal Protein</i>	<i>Minerals</i>	<i>Supplementary Vitamins</i>	<i>Additional Greenstuff</i>
Chicks (1-8 weeks)	None	Preferably a balanced chick starter				
Growing Birds (9-28 weeks)	Good pasture	Mixture: 3 coarsely ground cereals. e.g. 35 lbs. barley 12 lbs. oats 50 lbs. wheat and feed scratch grain in hoppers free-choice.	Free access to sour skimmilk or buttermilk with whey. (No water)	To ground cereal mixture add 2 lbs. oyster shell or limestone and 1 lb. salt (iodized).	None.	None.
	Poor pasture	As above and feed scratch grain in hoppers free-choice.	As above.	As above.	1/2 lb. or 1/2 pint fish oil thoroughly mixed into 100 lbs. mash*.	Cut alfalfa, clover, lawn clippings or vegetables as carrots, mangels, swiss chard, lettuce, etc.
Layers (28 weeks and over)	Good pasture	Mixture: 3 coarsely ground cereals. e.g. 35 lbs. barley 12 lbs. oats 50 lbs. wheat and hand feed scratch grain morning and night.	Free access to sour skimmilk or buttermilk with whey. (No water)	To ground cereal mixture add 2 lbs. oyster shell or limestone and 1 lb. salt (iodized).	None.	None.
	Poor pasture	As above and hand feed scratch grain morning and night.	As above.	As above.	1 lb. or 1 pint fish oil thoroughly mixed into 100 lbs. mash*.	Cut alfalfa, clover, lawn clippings or vegetables as carrots, mangels, swiss chard, lettuce, etc.
Layers in Winter	None	As above and hand feed scratch grain morning and night.	As above.	As above.	1-2 lbs. or 1 quart fish oil thoroughly mixed into 100 lbs. mash*.	Cured alfalfa hay or clover dry or moistened and vegetables as carrots and cabbage.

NOTE: *Fish oil of minimum potency of 1850 I.U. Vitamin A and 400 Vitamin D per gram.
Feed mixture of grit and oyster shell or coarsely crushed limestone in open hoppers to all st
Sour skimmilk or buttermilk should be offered in other than metal containers.

Plan Now for Better Crops in 1944

by R. Summerby

The production of a good crop depends upon several factors such as the fertility of the land, good drainage, freedom from acidity and the preparation of the land. Of these, land preparation is one of the most important and it is also one to which far too little attention is given.

At first sight it might seem that it is out of place at this time to discuss problems relating to 1944 and 1945. A little thought, however, will show that it is most important to do so. As one travels through the country in the late spring or early summer, one cannot help but be impressed by the condition of many hay fields. In spite of a favourable winter for grasses and clovers and good growing conditions, there are many fields with poor stands, that are loaded with weeds of a serious nature, such as couch grass, ox-eye daisies etc. An examination of other crops later in the season will also show that they are not all that they should be. The results are that we are far from getting the greatest value from our land. This reveals the fact that there is need for greater attention to the preparation of the land at one or more stages in the rotation, and it is clear that steps should be taken to meet this situation. Some of these steps must be taken during the summer months.

Hay and Pastures Most Important

Since from two-thirds to three-quarters of our tillable land is devoted to the growing of hay and pasture crops, it is of special importance to look into the causes of these not being as good as they might be. As a rule grasses and clovers are seeded along with grain crops, and it is common to devote major attention to this latter and to forget the special needs of the hay crops. The seeds of grasses and clovers being extremely small in size require a well prepared, firm seed bed, and unless this is provided many will fail to germinate and a poor stand will result. While the seed bed is important and may in part be responsible for poor stands, it does not account for the prevalence of weeds. Grasses and clovers are not good competitors of weeds and if the land is weedy at seeding time the crops will not only suffer for several years, but will get worse and worse, until the land is ploughed up and prepared again.

Planning Ahead

But a good seed bed, free from weeds, cannot be obtained by the preparation of the land at the time the grain is seeded, unless adequate steps have been taken in the previous years to accomplish this. It may thus be seen that in preparing land for any one crop, it is necessary to have in mind the crops which are to follow in later years. The crops which follow are often even more important, for they are down for several years. In preparing land in 1943 for a cultivated crop in 1944, one is at the same time getting ready for the grain crop in 1945, for the

clover crop in 1946 and for timothy hay in 1947. Each crop should do its part in making conditions favourable for the crops which follow. The two essential points are that the soil should be in good tilth, and it should be free from injurious weeds.

The logical place to kill weeds would seem to many to be in the growing of the cultivated crop of corn, roots, or potatoes. The killing of weeds in a growing crop is, however, an expensive problem, for one has to avoid injury to the crop and so requires a great deal of labour, and no matter how well done it may not be completely effective. A more efficient method is to do the killing before the crop is sown.

Summer tillage

One of the best ways of destroying most weeds is by cultivation during the summer months. Whether the land has been in grain or sod, to do this it should be broken up soon after the crop is off, so that as long a period as possible will be available to do the job. It should be worked down immediately and cultivated thoroughly as often as is necessary to keep down new growth. This should be followed by further cultivation in the spring before seeding. If time does not permit to do it earlier, it is well worth while delaying seeding of the cultivated crop for a day or two to allow for an extra thorough cultivation at that time. Cultivation before seeding is most efficient, for intensive work with large implements can be carried out without damage to the crop.

Such treatment should be followed by thorough cultivation of the growing crop. This should be done as often as necessary to destroy any new growth and to prevent weeds from taking hold again. If this is not done, all the previous effort may be lost and the cultivated crop will provide a weed nursery instead of being a weed destroying crop.

If for any reason, the practice is to have the grain crop with which the clovers and grasses are seeded, follow another grain crop, it is especially important that adequate steps be taken to kill the weeds before the second grain crop is sown, for no further opportunity is afforded in the rotation, to do so. In such cases one of the best means of doing this is to plough the land immediately after harvest and cultivate it as recommended above in the preparation of the land for a cultivated crop. On light land that is not too hard, the plough may be replaced by intensive treatment with a heavy disc or a stiff-tooth cultivator. The use of an early variety of oats or barley is of advantage in allowing for early ploughing or cultivation.

Such treatment should not be considered as taking the place of good ploughing. Because it is a slow operation, ploughing is often done carelessly, and as quickly as possible. A point that should be emphasized strongly is that ploughing is still the basic operation of tillage and when it is necessary to do it, it should be well done.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

The Quebec Poultry Industry Committee

The Quebec Poultry Industry Committee is taking a leading place in the agricultural development of the Province. The work of the Committee to date has been largely educational in nature, although the members of the executive are at present collaborating with the Canadian Feed Manufacturers' Association in making a general survey of the live stock feed situation.

Professor W. A. Maw, head of the Poultry Department at Macdonald College, who initiated the original organization work in developing the committee, was re-elected as chairman for the second year. Professor A. Graton of the Oka Agricultural College is co-chairman.

Regular monthly meetings have been held throughout the year, with special emphasis being given to certain problems at each meeting. During the month of May the special problem was "Pastures for Poultry". The month of June has seen very active work done through the Committee in making a general survey of the poultry meat price situation, giving particular attention to the Wartime Price and Trade Board Order No. 268 relating to "Live Poultry Prices".

As the Committee is all-inclusive in its general representation of all allied interests, it is relatively easy to get the necessary interest in such problems as 'price', which is basic to all trading in live and dressed stocks. As it is also essential that 'costs' be properly considered for the price to be paid to the producer, as well as to the processor, distributor or retailer, the Industry Committee has the opportunity of bringing into play co-ordinated thought by all interests. Such activity is much

appreciated by all concerned and tends to develop a fine spirit of co-operation essential to the general interests of industry success.



Left to right: Prof. W. A. Maw, Prof. A. Graton, A. Tremblay; chairman, co-chairman and secretary-treasurer of the Quebec Poultry Industry Committee.

Guide to the Protection of Vegetables

The Department has just published a "Guide to the Protection of Vegetables" which will be useful to all vegetable growers whether they grow supplies for the market or only a few rows in the garden for use in the house. The guide is printed on cardboard in English and French, and is a convenient size to hang on the wall where it is always handy.

The guide lists the common pests with simple control measures for each. It is free and may be obtained by writing to the Information Service, Department of Agriculture, Quebec, or to the *Journal*.

Honey Prices Unchanged

Honey producers and dealers are being notified by the Wartime Prices and Trade Board of the new order setting ceiling prices for the coming season. There is not much change in the new prices from those in effect last year. The maximum wholesale price for extracted honey in bulk is still 12½ cents lb. and producers selling the extracted honey in bulk or in large containers other than glass, direct to consumers on the market or otherwise, are permitted to add three cents lb. to the wholesale price for pasteurized granulated honey in bulk is 14 cents lb. Producers who sell honey in a standard comb honey section have a maximum price of 40 cents per section.

Lachute Fair, Wet but Undaunted

The Lachute Fair seems to rank second only to a Sunday School picnic in its ability to bring rain, and this year it certainly lived up to its reputation. Judging had to be abandoned entirely in the horse ring, which was under water most of the time, and the horses were judged at odd spots on the grounds. However, the fact that it rained so heavily had the effect of increasing attendance of spectators, for with their fields unworkable, local farmers felt free to take a day off to attend the fair with clear consciences.

Entries in the different livestock classes were not as numerous as in the past but there were a number of new exhibitors out which helped make things interesting. There were 14 exhibitors with Ayrshires, 6 with Holsteins, but only 1 each in Jerseys, Canadians, Shorthorns and Aberdeen Angus, which lessened the interest in the judging of these classes. There were disappointingly few entries of sheep and swine but the exhibits made up in quality what they lacked in quantity. The heavy horse exhibit was smaller than usual but included many animals not before seen at the Lachute show.

Winners

Space does not permit a complete listing of all winners, but championships were as follows:

Ayrshires:

Junior and grand champion male, E. L.

Ruddy, Pickering, Ont., on Sunny Dale Starlight; reserve junior, John McLennan, Martintown, on Sunny Dale Pearl Star. Senior and reserve grand champion male, Ruddy, on Sycamore Gold Coin; reserve senior, Cumming Bros., Lancaster, on Cherry Bank Brown Bomber.

Junior champion female, Mrs. McCormick, Grande Anse, on Springlea Flirt; reserve, Mrs. McCormick on Springlea Miss Pride 2nd. Senior and grand champion female, Ruddy on Bois de la Roche Cherry 34th; reserve senior and reserve grand Mrs. McCormick on Glengarry Blackbird.

Holsteins:

Senior and grand champion male, J. Vailancourt, Glen Roy, Ont. on Glenafton Acme Mercedes. Senior and grand champion female, Wilson Bros., Lachute, on Countess Netherland Ormsby. Junior and reserve female, Wilson Bros. on Inka Tortilla Debora.

Horses

Gilbert Arnold had 60 head at the show and dominated many of the horse classes, but M. & D. Smith of St. Hermas had the grand champion mare in Clydesdales and a yearling stallion owned by A. T. Cleland was male champion. Arnold had all the championships in Percherons and Belgians, and the champion Canadian stallion. Mrs. R. M. Bond, Lachute, had the grand champion Canadian mare.

Sheep Policy Helps Farmers

The Sheep and Swine Division of the Livestock Branch has recently analyzed the results of its policy of supplying breeding stock of good quality sheeps to farmers and to new settlers in the colonization districts, and the result indicates how much help the Department of Agriculture has given to the sheep-raising industry in this province.

In 1942, 2752 ewe lambs were distributed to colonists. The colonist-farmers paid \$4.00 for each lamb: the rest of the cost was paid jointly by the Departments of Agriculture and Colonization, and amounted to \$7.75 per head. In addition, 242 pure bred rams were distributed free with the cost borne by the two departments.

Farmers in other parts of the province were helped to buy 3115 ewe lambs at a cost of \$8.00 each. These animals were selected on the markets by officers of the Department and were sold to farmers asking for them. In addition, farmers who had previously not kept sheep were granted \$2.00 per lamb for local animals bought off farms and approved by Department officers: 4189 ewe lambs were thus purchased.

Fishermen in Gaspé were also aided, on the same basis as the colonists reported in the second paragraph.

Ram grading

In 1942, 1,421 rams were graded, which was an increase over the 1,221 graded in 1941. Purchase bonuses were paid on 410 XXX rams: 394 XX rams and on 25 two and three year old XXX rams.

Shipments to market were greater in 1942 than in the previous year, as the figures below show.

	1941	1942
Lambs, good	74,074	89,910
Lambs, heavy	1,474	1,831
Lambs, common	14,263	10,967
Rams	33,661	33,219
Ewes	23,666	21,933
	147,138	157,870

The total number of sheep in Quebec in 1942 is given as 543,600 head, compared with 527,479 in 1941. During 1942 bounties were paid on 25 wolves killed and on 917 bears.

Where Are The Potatoes?

The harried housewife who has been trying to serve attractive meals without that old standby, the potato, may well be asking, "Don't we grow plenty of potatoes in Quebec?" To answer her question, and those of other who may be wondering how we stand in potato production in this province, here are a few facts and figures about potato growing in Quebec during the last few years.

A little study of these figures shows three things. First, there has been quite an increase in the total area planted in potatoes—13.7%, to be exact. The yield, however, has fallen off, except in 1940, to an average of 115 bushels per acre. The increase in price, progressive each year, has increased the value of the crop as a whole, even with falling production.

These average yield figures are far from what they could be if better cultural practices were used. Poor seed is one of the prime reasons for our low yield per acre. If every farmer in Quebec who grows potatoes would use certified seed our total production would increase

amazingly. In 1942, on 50,000 acres planted with certified seed, the average yield per acre was 275 bushels. Compare that with the average for the province of 115, which would be still smaller if it did not include some high yielding fields where certified seed was used.

Then we have insects and diseases which do their bit in lowering production. Spraying with poisoned Bordeaux starting just as soon as the plants are up far enough so that the rows can be seen, and continued at intervals of 8 to 10 days until the crop is ready to harvest, will give complete protection. But it must be done thoroughly. Eight sprays should be put on for maximum protection; in no case less than five, unless blight and potato bugs are to get a large share of the crop.

The Department has published a "Guide to the Protection of Potatoes." It is a card which hangs up conveniently on the wall and is printed in English and French. It is free—write to Quebec for one, or to the *Journal*.

<i>Year</i>	<i>Planted Acres</i>	<i>Yield per acre</i>	<i>Total Production</i>	<i>Value per Bushel</i>	<i>Total Value</i>
1939	138,000	129 bushels	17,895,000	\$0.69	\$12,438,000
1940	150,000	146 bushels	21,875,000	0.48	10,500,000
1941	153,000	125 bushels	19,125,000	0.79	15,032,000
1942	157,000	115 bushels	18,055,000	0.97	17,441,000

Feed Grain for Next Winter Should Be Ordered Now

All farmers who will need western-grown grain for live-stock feed next winter are advised to order and take delivery as soon as possible while transportation facilities are better able to take care of grain movement than they may be later.

Since the normal movement of feed grain by way of lake shipments has been interfered with the necessary reserve supplies have not been built up in Eastern Canada by the grain trade. To avoid a possible shortage of feed grain the Dominion Government has undertaken to build up a reserve, the details of the operation to be handled by the Feeds Administrator and the Agricultural Supplies Board. The grain so arranged for will be used only to meet emergency conditions, should they develop.

Because of unusually bad weather conditions, rail traffic in the winter of 1942-43 was greatly curtailed. This slowed up the movement of grain from the West and only a part of the needed supplies got through. It is

expected that feeding requirements in Eastern Canada for western grain will be even greater in 1944 than in 1943.

Ceiling prices on oats, barley, millfeeds and commercial mixed feeds will be maintained for the feeders' protection. The Government will continue to pay freight assistance on Western feeds moved from Fort William east, which should prevent a rise in the cost of feeds.

Prospects are for an abundant hay crop in Eastern Canada, and with arrangements made to ensure supplies of Western grain to supplement feed grown here, there should be no need to consider any restriction in livestock raising because of fear of shortage of feed.

Order Coal Now for Chick Brooders

The Dominion Department of Agriculture has been advised by the Coal Controller to urge poultry raisers in Eastern Canada to place their orders for American anthracite coal for brooders for the coming season without delay and to take delivery as supplies are available. Unless this is done, the Department points out, it may not be possible to obtain sufficient supplies.

Attractive Programme Features Beef Cattle Field Days

With speakers from Macdonald College, The Provincial and Federal Departments of Agriculture and The Canadian Shorthorn Association an attractive programme was provided for the Beef Cattle Field Days held at Inverness and Lennoxville. The attendance might have been larger at both places except for the very late seeding and the bad conditions following the heavy rains of the previous week. At Inverness twenty-five farmers and farmers sons took part in the judging competition. At Lennoxville a large and representative crowd was in attendance from the Bury breeding center while a smaller representation was present from Richmond, Sherbrooke and Stanstead counties.

The programme featured the breeding and development of better beef cattle and the production of more and better quality feed. At Inverness an excellent class of cows and heifers bred and developed by W. G. Learmonth and Sons were used by Mr. Geo. E. Day, formerly secretary Canadian Shorthorn Association, for the demonstration. These uniform, low-set, quality animals made an excellent class for the competition and as demonstration material for the points emphasized by Mr. Day. There was a very keen interest displayed by all as was indicated by the large number of questions asked and the number actually taking part.

Prof. R. Summerby, Macdonald College, discussed pasture and cropping practices. He paid particular attention to the intelligent use of fertilizers, the control of feeds and proper cultivation. He advised the farmers to make more use of the available information on fertilization and to prepare their soil more thoroughly to obtain the returns they might expect. Speaking of the hay crop he advised earlier cutting of hay and in some cases putting it in the silo. Experiments at Macdonald College have shown a very small difference in the total yield harvested but a variation of from 20 percent protein in early cut hay to as low as 6 percent protein for late cut hay. By starting haying a week earlier than usual the farmer actually increases the total amount of protein he has for feed.

There was a very keen interest displayed in the projects being carried on at the Lennoxville Experimental Farm. In the cattle section five groups of four animals each from different sires were used to demonstrate the importance of good bulls and the need for more information in the purchasing of Shorthorn bulls. Prof. Ness in referring to these groups emphasized the need for closer study of pedigrees and more familiarity with the animals in the herd. "We must learn the peculiarities of the individuals and be able to appraise more accurately the weaknesses of our own cattle if we are to make the progress in breeding we expect", he stated. Mr. J. A. Ste. Marie, Director of

the farm agreed with this statement and added that good beef cows should produce a good quantity of milk. Farmers of the Eastern Townships must aim to improve both and to maintain a proper balance between beef and milk if they are to attain satisfactory returns. Mr. Day in speaking of the herd sires mentioned that there was every encouragement for the breeder of good cattle to-day. He pointed to the prevailing high prices paid for good sires and females and stated that there was every reason to believe this will continue for a number of years. He also referred briefly to the high honor paid our farmers and breeders by His Majesty the King. This was the first time that such honors had been awarded in Canada and it indicated the important part farmers are taking in the great conflict going on. It should be an encouragement not only to present day but to our future farmers as well.

Mr. W. Davies, Federal Department of Agriculture and Dr. Gendreau Veterinarian, Sherbrooke, discussed artificial breeding and the importance of making greater use of outstanding sires. At present good bulls are scarce and high priced. When organized to breed artificially a whole community has a chance to secure the services of a good bull and render improvement. This is being done over very wide areas of the United States. It will no doubt become a more common practice here in the near future.

Prof. L. H. Hamilton, Secretary of the Beef Cattle and Shorthorn Association spoke of the activities being carried on by these groups. He pointed with satisfaction to the whole hearted cooperation and help being received from the Provincial and Federal Departments of Agriculture. "If you will organize and develop a sound programme you may expect all the help necessary in carrying it through", he stated. He also stressed the importance of encouraging the boys and girls not only to take part in these events but to become a part of them.

CANADIAN CATTLE FOR U.S.

A herd of Canadian cattle composed of nine cows, three heifers and a bull were shipped from St. Johns recently to Mr. Prew Savoy, a lawyer who has a 400-acre farm in Maryland some sixty miles from the American capital on which he already has a herd of Ayrshires and Holsteins. Mr. Savoy wanted to give a typically Canadian touch to his herd and was persuaded to buy the Canadian cattle. They were obtained for him by selection from the herds of our best breeders who had stock to sell, and the total value of the shipment was \$3,000.00.

The shipment was got together by Marc Leclerc, Canadian fieldman and the loading operations were watched by many interested breeders, and by officials of the Department of Agriculture.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Cuna Extends Into Canada

Dr. A. B. Macdonald of St. F.-X., is now National Treasurer

Cuna — not a new kind of insect but a dynamic and thriving organization which embodies a great idea — an idea, incidentally, that came to this continent by way of Quebec, is now extending its good work into one province after another in Canada. The Credit Union National Association with its home in Madison, Wisconsin, affiliates four million members in North America in 10,000 Credit Unions in the United States and 2000 in Canada, and is growing fast. Three new leagues were admitted to membership at the annual meeting held in Chicago in May — all of them Canadian; Prince Edward Island, Montreal and Saskatchewan. Leagues in Alberta, Manitoba and New Brunswick also are now considering affiliation.

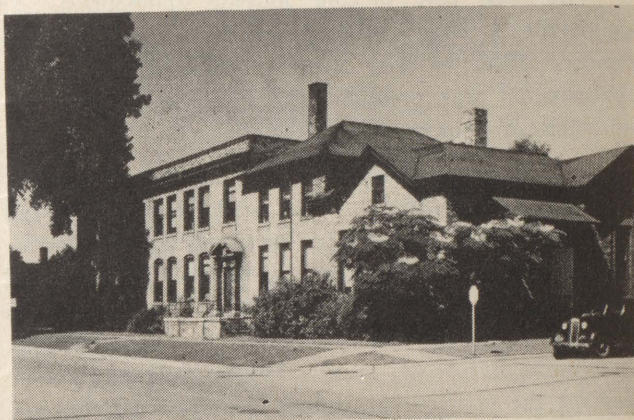
The work of Cuna includes organizing Credit Unions, looking after legal affairs, representing Credit Union interests to legislatures and general promotional and educational activity. The present cost of this to Credit Union members is seven cents a year. Next year it will be lowered to six cents (with a maximum membership of \$6000 for a league) and as the association grows the cost will be further reduced, it is hoped, to as low a figure as three cents a member.

Growing out of the practice of insuring loans, the Cuna Mutual Insurance Society has had a spectacular development, while the monthly publication "The Bridge", edited by J. Orwin Shipe, the educational director of Cuna, is one of the best of its kind.

The Annual meeting this year brought together 112 National Directors representing 52 Credit Union Leagues in America, marking a great development since the Association was founded in 1934. Dr. A. B. Macdonald of St. Francis Xavier, Antigonish, N.S. was elected Treasurer. Roy F. Bergengren who has been Managing Director for 23 years continues in that office and Thomas A. Doig is his assistant. There are five field men in addition to the headquarters staff.

Outstanding progress in Credit Union organization was reported from Ontario with nearly 150 unions organized — 90 of them being affiliated with the league.

The Journal recently visited Raiffeisen House, the headquarters of Cuna and met some of the active officers of the Association. The spirit of these leaders was impressive, reflecting business efficiency accompanied by fine vision of the work that the Credit Union Movement can do for humanity.



Raiffeisen House, Madison, Wisconsin, headquarters of Credit Union National Association.

Basic Knowledge

Officials and members of co-operative associations should make every effort to see that a knowledge of the Rochdale principles is spread among the people. Any co-operative purchasing association which departs from these principles is inviting trouble for itself. Briefly stated, the four principles are as follows: first universality, embracing open and voluntary membership with strict neutrality on all matters of race, religion and politics; second, there must be democratic control with one and only one vote for each member and no voting by proxy; third, the interest on capital must not exceed a moderate rate; fourth, after suitable provision has been made for necessary reserves, any savings or surplus must be allocated to members and patrons in proportion to their purchases.

In order to carry out these principles certain methods of business must be followed. These methods are: first, sales of goods are made at regular market prices; second, all business is done for cash; third, a continuous program of education in co-operation is carried on; fourth, reserves are built up to meet the needs of the association.

In keeping members fully informed on wartime programs and in helping them do their individual jobs, farmer co-ops can and are helping to win the war.

Co-operative Movement Expanding

In Canada the expansion of co-operative activity has taken place most rapidly and to the greatest degree in the marketing of farm products. In 1941 a total of 699 farmers' co-operative marketing associations with 3,250 places of business reported to the Marketing Service, Economics Division of the Department of Agriculture. Membership totalled 376,405 with sales of farm products and supplies amounting to \$220,201,545 during the year. It is estimated that all marketing co-operatives handled approximately 31 per cent of the main farm products entering commercial channels of trade. In addition 696 farmers' co-operative purchasing associations with 75,280 members reported total business transacted of \$21,956,760. The purchasing organizations have been formed principally in the rural areas of western Canada for the purpose of buying supplies, usually bulk commodities, such as gasoline, tractor fuel, coal, wood and binder twine. Some are operating stores carrying a full line of general merchandise.

Available statistics on consumers' societies in Canadian cities and towns, while incomplete, indicate a total membership of approximately 15,000 persons who buy co-operatively 4 to 5 millions dollars worth of consumers' goods annually. Many of the rural societies and the marketing associations are affiliated with the Co-operative

Union of Canada. The Union functions in an advisory and educational capacity, for its affiliates and has had a guiding influence on the Canadian co-operative movement.

Credit unions are active in all provinces of Canada. Approximately 1,300 were chartered in Canada at December 31, 1941, with a membership close to 240,000. More than \$125,000,000 has been loaned to the members of the various credit unions in Canada during their period of operation. Loans in the year 1941 totalled about \$10,000.

A mutual fire insurance company was formed in Ontario in 1836 and several others, still functioning as farmers' mutuals were organized between 1850 and 1860. Today there are about 365 such companies in Canada with net assets of over \$9,000,000 and insurance at risk amounting to over \$1,000,000,000.

Approximately 102,286 or 6 per cent of the telephones in Canada are operated by rural co-operative companies in which there is a total investment of \$20,000,000.

Societies have been formed by fishermen on both coasts for the purpose of canning and marketing fish and buying gear on the co-operative plan. During 1941, 77 fishermen's co-operative societies in Nova Scotia, Quebec and British Columbia with a membership of 4,500 did a business amounting to \$2,645,698.—Rural Co-operator.

Market Comments

Prices of live stock advanced during the month. All meat prices were higher, reflecting the seasonal allowances permitted by ceiling regulations. Higher prices for fruit and vegetables also reflected not only the seasonal advances but also the somewhat scant supply.

The unmentionable weather has kept farmers behind with their work. Crops that were established the previous year, such as hay and pasture, have been doing fairly well, and hay and pasture are the important crops in Quebec and the Maritime Provinces.

Present prospects are for a material increase in apple production over the past two years in the Annapolis Valley.

Farmers are officially advised to purchase feed grains as soon as possible, in expectation of increased demands for the coming feeding season. The provision of feed for the future is somewhat similar to the fuel situation. Official advice is to lay in future supplies, when, as, and if available.

Rates of wages for farm labour, as compared with the two previous years, have just been announced. Monthly wages of farm labour with board for all Canada is reported in 1943 at 21 per cent above that of 1942, and 61 per cent over that of 1941.

Trend of Prices

	May 1943	June 1942	June 1943
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt.....	12.00	11.08	12.95
Cows, good, per cwt.....	9.50	9.90	10.25
Cows, common, per cwt.....	7.30	7.88	8.53
Canners and cutters, per cwt.	5.75	6.10	6.50
Veal, good and choice, per cwt.	13.50	14.70	15.00
Veal, common, per cwt.....	11.00	13.25	12.85
Lambs, good, per cwt.....	16.40		19.50
Bacon hogs, dressed, B. 1, per cwt.	15.75	16.90	17.10
ANIMAL PRODUCTS:			
Butter, per lb.	0.34	0.33	0.33
Cheese, per lb.	0.22	0.23	0.23
Eggs, grade A large, per doz.	0.32	0.35½	0.36½
Chickens, live, 5 lb. plus, per lb.	0.24½	0.33	0.30
Chickens, dressed, milk fed A, per lb.	0.30	0.35	0.35½
FRUITS AND VEGETABLES:			
Apples, B.C. Winesaps, per box	3.80	4.25-5.00	5.00-6.00
Potatoes, Quebec No. 1, per 75 lb. bag	175-1.95	2.10	2.20
FEED:			
Brn, per ton ...	29.00	29.00	29.00

Strippings

by Gordon W. Geddes

Well, if the water had been flowing in the right direction we might have arrived at Macdonald College several days before the Farm Forum Conference. Since it was not and we should only have been carried out to sea, we could only hang onto the tree-tops and wait for the flood to go down. All hope of getting to the Conference did wash away for it meant so much more work to be done when there was already too much. It was about the worst storm we ever had. Our own crop and road damage was not as severe as last year but in the district as a whole it was much worse. Hope it doesn't get to be an annual event with ever-increasing severity.

We are beginning to realize the labour shortage more fully. Eddie promised to stay with us and then got an urgent call elsewhere. The Agronome was able to get us a French boy who wished to learn English. Now, because of top rank in Mathematics, he has been offered a special course during the summer. So off he goes and who comes I don't know. Men may come and men may go but the boss goes on forever.

I wonder if we shall get a different type of weather prophet next time? Eddie could tell when it was going to rain by a pain in his knee. Raymond is more scientific and tells by the colour of a piece of cloth soaked with nitrate of cobalt. It is pink in wet weather and blue in fine. The only trouble was that neither one of them could tell far enough ahead. Everyone else knew it was going to rain by the time they did. I'll bet if old Adolph had a shirt made of such cloth, it would be pink most of the time and not because he was seeing the world through rose-coloured glasses, either. Or maybe the salt in perspiration would destroy the chemical.

The weather man is one of the factors that makes it such a gamble for farmers. We had just finished burying \$175 worth of fertilizer, seed, etc. when the storm hit. Fortunately not much of it was lost though many people did lose a good deal. Add to this the

SHE'S DOING WAR WORK



Not all war workers are found in factories. The farmer himself, his wife ... very often the children too are actively engaged in the production of foodstuffs urgently needed for our fighting forces and civilians in many lands. Canadian farmers and their families have important war work to do ... and are doing it.

LOANS TO FARMERS... Do you need cash to gear your farm to peak war production? Your enquiries are invited and will be carefully considered by your local branch Manager.

The Royal Bank of Canada

Send Money by
CANADIAN NATIONAL EXPRESS Money Order
Safe • Convenient

Payable at Par Everywhere
For Sale at all
CANADIAN NATIONAL RAILWAYS STATIONS and EXPRESS OFFICES

Bought YOUR
War Savings Certificates
This Week?

Canada West Indies Molasses Co. Limited
Montreal

labour charge involved in planting and harvesting and marketing and it amounts to quite a sum, almost a pot of gold at the rainbow's end. Multiply it by the 750,000 farms in Canada and it makes a treasure worth looking for. However, one does not need a diving rod to locate it. Either it grows and reveals itself or it doesn't and isn't worth hunting for. If it doesn't, the more one buries the heavier the loss. If it does the greater the return.

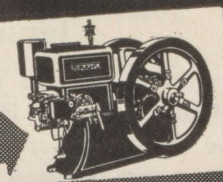
The six bushels of Vanguard oats which we got from the Experimental Farm proved a good investment. The first year we saved enough for our seed. Last year they gave a splendid crop and this year we sold a lot to neighbours. If they all give an increased yield over other kinds they will add quite a bit to the crop. And for once there is no danger of growing enough to depress prices, the only danger is of growing too few and going hungry. Last year we mixed some barley with part of them but it was not the right kind and ripened too early. Still we harvested 1600 lbs. per acre from it. However, we did not want any more of that kind so it was all ground for feed. This year we were able to get some Pontiac which should do better.

The co-operative spirit keeps growing at Coaticook. Now they have a feed and grain co-op in addition to the creamery and fire insurance. They handle all kinds of feed, seed, fertilizer, insecticides and fungicides, paint and paper, hardware, oil and gasoline. The store, creamery and insurance are all separate companies but the office for all is in the same building and managed by the same staff. They also have the official egg-grading station for Coaticook district. If they keep on they may become so co-operative that they will even be able to control the floods.

Low testing cream is not economical. Creameries can operate to much better advantage if the test averages around 35% and cream testing around this figure keeps better.

FORANO

The stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

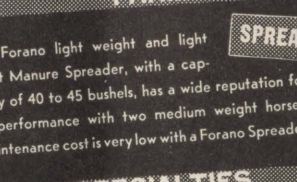


MOTOR

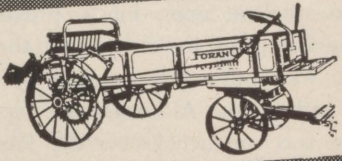


THRESHER

The Forano-Quebec Thresher is a well known machine, long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts—the only machine of its kind.



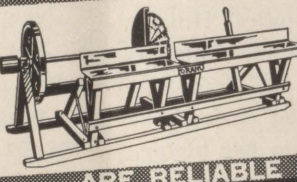
FARM SPREADER



CORDWOOD SAW FRAME

The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano Spreader.

Buy a Forano Cordwood Saw Frame. It is simple — heavy — well made and will last a lifetime.



ARE RELIABLE



THRESHER

The Forano All-Steel Thresher is our pride. Customers like it for three reasons: Firstly, for its particularly good performance, quality and quantity; secondly, because it is a well built machine; thirdly, because it has a good appearance.

Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.



ROOT CUTTER

FREE CATALOGUE ON REQUEST

THE PLESSISVILLE FOUNDRY

PLESSISVILLE P.Q. CANADA

Makers of FORANO Products since 1873

Potato Yields Dropping in Ontario

Potato acreage and yields during the past two years in Ontario have been the lowest for sixty years, says a statement issued by the Crops, Seeds and Weeds Branch of the Ontario Department of Agriculture, in which an appeal is made to growers to improve their cultural methods and adopt a vigorous programme of spraying and dusting in order to bring up the yield per acre.

During the past number of years imports of potatoes into Ontario have increased from 1,139 carloads of a 400-bag minimum in 1931 to 4,003 carloads of a 600-bag minimum in 1942. In the same period, potato acreage in Ontario has been reduced by more than 50,000 acres in comparing the year 1931 with 1941, of which more than 41,000 acres were in Western Ontario. Yields per acre have been constantly on the decline, from 68.1 cwt. as an average in the period from 1891-1900 to an average of 59.3 cwt. per acre in the period 1931-1940.

Harvey District Honours Famous Jersey Cow

The annual meeting of the New Brunswick Jersey Cattle Club was held at Harvey, N.B., on Thursday, June 24. The day was claimed to be the first really warm day of the season. The type classification demonstration of Jersey cows was conducted by A. R. Ness on the farms of Earl Lyster, Maurice Lyster, Kenneth Embelton and Son, and Charles Robison and Son. A large crowd of neighbouring Jersey breeders from the surrounding famous Harvey District followed the classification work at each of these farms with great interest.

The excellent noon lunch, provided by the St. John Milling Company and served by the ladies of the community, was thoroughly enjoyed by almost two hundred Jersey enthusiasts. Although the business of the annual meeting was conducted over the lunch table, the important part of the programme was the honouring of the Embelton family upon the wonderful achievement of their home bred Jersey cow, Hillside Marjorie. Hillside Marjorie, the cow herself, was in attendance, contented and chewing her cud. She had been on the Record of Performance for her entire lifetime and had attained the production of 7,000 pounds of butter fat in her lifetime on two milkings per day. In order to pay respects to the work of the Embelton family with this Jersey cow, presentations were made to Mr. Embelton, as well as to his mother and sister, from the Canadian Jersey Cattle Club, the New Brunswick Jersey Cattle Club and the local Harvey District Breeders' Club. Those in attendance from a distance were James Bremner, Secretary of the Canadian Jersey Cattle Club, J. K. King, Deputy Minister of Agriculture for New Brunswick, A. R. Ness from Macdonald College, and W. T. Hunter, Field Man for Eastern Canada of the Canadian Jersey Cattle Club.

Eastward Farm Excursion Reverses Peace-Time Harvest Plan

Having completed their spring seeding in the west, prairie farmers have come to help out Ontario farmers in a number of districts. They will complete work in this eastern area in time to provide a bountiful crop here and return to the west to reap their own harvests. In Ottawa they were welcomed by Department of Labour and Department of Agriculture heads.

Altogether about 1,000 men are coming east to Toronto and Ottawa, where they will be assigned to farms. An interesting sidelight on the movement is that it reverses the harvest excursions of the 1920's, when thousands of men journeyed from the east to help the prairie farmers bring in their crops. Last year many university students went west to lend a hand with the harvest.

Reports 88 Pigs in 7 Litters

There would be plenty of little pigs in Nova Scotia, and not the scarcity now prevailing, if all sows were as prolific as two young ones owned by James Sproule, Falkland Ridge, Annapolis County. Both of these sows had their first litter in the winter of 1942. One farrowed her fourth litter May 15 while the other is due to farrow her fourth in July. From the seven litters there is a total of 88 living pigs — an average of nearly 12½ to the litter.

Don White, Annapolis County Agricultural Representative, in commenting on this high production remarks, "some people may be of the impression that such a large number of pigs raised in such a short time is largely due to good luck, and perhaps it is, but if anyone visits the Sproule farm he will be convinced there is also considerable good management at the farm."

Heading Towards New Chick Record

New records appear to be in the making in chick hatching in Nova Scotia according to reports received from C. M. MacMillan, Halifax, Poultry Products Inspector, with every indication that the 1943 hatch will be well over the million mark. Last year a record was made when the hatch totalled 981,155 which was an advance of 129 per cent in a 3-year period. Hatchery reports, at the end of April, showed the number of saleable chicks this year to be up 25 per cent when compared with the same period last year.

Mr. MacMillan, discussing the situation, said the demand for chicks was the highest in the history of the industry and that despite the increased production many orders for baby chicks will be unfilled. Nova Scotia hatcheries had been working to capacity since February. Most of them plan to close early in July with the prospects that a few will carry on till August. Hatcheries started earlier this year, than formerly, and are continuing later. The following table shows the eggs set and saleable chicks at the end of April this year with the end of April last year.

	Eggs Set	Saleable Chicks	Percent Hatchability
Up to April 30, 1942	716,068	507,713	70.8
Up to April 30, 1943	888,950	633,135	71.2
Records (far from complete received to date for May, 1943)	268,095	195,997	
Total to date	1,157,045	829,132	71.6

Mortality this year has been lower than last and practically all cockerel chicks are being raised for meat.

With no eggs and practically no poultry in storage in Canada and egg production now falling off, there is every prospect of a strong market and an increased demand for both eggs and poultry throughout the summer.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Quebec Women's Institutes Hold Annual Meeting of Board of Directors

Owing to transportation difficulties and the war situation in general, Quebec Women's Institutes cancelled the annual convention, the Board of Directors only meeting on June 29-30 for the consideration of necessary plans and routine business. Mrs. C. E. Dow, retiring President, presided at the opening exercises.

The slate of officers for the next two years as presented by the nominating committee, of which Mrs. C. E. Petch was convener, was accepted without change, reading as follows:—

Hon. President, Mrs. C. E. Dow; President, Mrs. W. C. Smallman; First Vice-president, Miss Alice Dresser; Second Vice-president, Mr. R. Thomson; Secretary, Mrs. A. E. Abercrombie; Treasurer, Miss Abbie Pritchard; Agriculture, Mrs. H. C. Yates; Home Economics, Mrs. M. L. Kezar; Welfare and Health, Mrs. Grant Lebaron; Education, Mrs. Russell Patterson; National and International Relations, Mrs. W. G. Kuhring; War Service, Mrs. Howard Smith; Publicity, Mrs. M. E. McCurdy.

Mrs. Dow's Farewell Address

Mrs. Dow's final address to the Board pointed out the exceptional difficulties in carrying on W. I. work during the past year of adverse weather conditions, saying that those Branches which had carried on under these conditions were worthy of special mention.

Women, Mrs. Dow urged, must have a part in post-war reconstruction; must use all opportunities of voting,

and claim a place at the Peace Table. While commending the doing of Red Cross work, making ditty bags, as an annual gesture of good-will to those who "go down to the sea on ships", aiding in projects for the help of those nearer the fighting zone, Mrs. Dow said that these could not replace the many varieties of W.I. work to which its members are pledged.

Retiring President Receives Life Membership

Mrs. C. E. Dow, retiring President of Q. W. I., and President-elect of the F.W.I.C., was presented with a life membership in the latter organization in recognition of her services as President for four years of Q.W.I. Mrs. C. E. Petch presented the gift, on behalf of Quebec Province.

Mrs. Collier Guest of Convention

Mrs. Collier, first Vice-President of the F.W.I.C., was present at the Board session on Wednesday and spoke briefly. Mrs. Collier told in an interesting manner a story of W.I. achievements in Western Canada, particularly in her home Province in Saskatchewan.

Interesting Items

The MacFarlane Memorial Scholarship was won this year by Miss Jean Millar of Drummondville.

As the meeting of the Associated Country Women of the World was being held in London, Eng., on the same dates as the Q.W.I. a message of greeting was cabled to them during the sessions.

The Convener of Education of Q.W.I. is automatically



Members of the Board of the Quebec Women's Institutes, photographed at Macdonald College on June 29th, 1943.

First Vice-President of the Home and School Council of Quebec.

The programme outline for 1944 will be prepared by Papineau County.

The balance on hand in the general fund of the Province was given in the annual report of the Treasurer, Miss Pritchard as \$1,036.01, with the aggregate of the special funds amounting to \$1,057.72.

Mr. H. C. Avison Addresses the Board

A Canada-wide programme for reconstruction education was explained by Mr. H. C. Avison as "a new enterprise thrilling in its scope". As the pioneers of young Canada met and coped with their problems, so to-day plans must be made to meet present problems. The new movement sponsored by many distinctively Canadian organizations is to begin in October with a series of broadcast which will undertake a programme of reconstruction education, intended to reach the country, city and town alike.

Red Cross Work

by Lucy M. Daly

Wakefield Branch in Gatineau County has undertaken a wonderful piece of war work in the organizing and equipping for the Red Cross of a Mobile Unit for blood donors. On May 18, when the scheme started, eighty donors were expected, but these will not be confined to the County, although all the work is being done by the Branch at Wakefield. This is a large undertaking and a good deal of work for the members, as meals are served, assisted by donations of supplies from other Branches in the County.

Good reports have been received from the counties, 2138 pounds of jam was donated for Red Cross work; money collected amounted to \$258.00, knitting and sewing, 5154 articles.

Beech Grove Branch served meals at an auction for the Red Cross. Bristol Busy Bees collected \$92. for the Aid to Russia Fund. Elmside completed their ninth quilt this year for Red Cross. Shawville donated \$20. to Russian Relief, \$10. to Red Cross and Wyman donated \$13. to the Self-Denial Fund. The Branches are expected to fill 250 ditty bags before the end of the year, and many are going at the work in a spirit of earnestness which promises success. This will mean an outlay of considerably over \$1,000.

Belvidere Branch sent two boxes and maple sugar to boys overseas. Sixteen articles of sewing and two pairs of seaman's socks were sent to the Red Cross, and 94 War Savings Stamps were sold. Megantic county sent a quilt to the Red Cross and several knitted articles, sent maple sugar overseas, and are making 5 ditty bags for sailors. Abbotsford is giving War Savings Stamps as school prizes.

I had the honor of addressing a bi-lingual meeting and concert recently on W. I. work.

Q.W.I. Notes

Many of the Branches in the Province featured agricultural subjects and gardening information at their meetings in May. Sales and exchanges of seeds, bulbs and roots lent interest to County Conventions and Branch meetings.

Chateauguy-Huntingdon County.

Aubrey Riverfield Branch had a talk on gardening and the control of pests. Compulsory education was discussed, and a paper on 'The Wife as a Business Partner' was read. Ormstown Branch is making ditty bags and giving self denial donations. Howick planned to make four ditty bags. Twenty-four dozen eggs were sent to the Friendly Home in Montreal. Arrangements for a School Fair were discussed. A presentation to Mrs. Greig, retiring after seventeen years as secretary, was a feature of the meeting. Women as farmers was discussed Dundee Branch. Franklin Centre had a demonstration on the grading of maple syrup.

Pontiac County.

The Branches in this county are sending seeds to Australia, as the planting season there will commence in September. Fort Coulonge studied the care of houseplants. A new departure was tried out by the Elmside Branch when an open air meeting was held with a large attendance of both men and women. The County Agronomist, Mr. Neil Drummond was on the programme, giving a talk on the care of young farm animals, and Mr. Dalton stressed the value of farm book-keeping. Mr. Blackburn representing the Federal Government, spoke on Working for Victory, and Shawville had a paper on Victory gardens. Wyman had a paper on Soybeans. Beechgrove had a paper on school lunches, and Wyman discussed free school text books. These two Branches donated \$5. to the Refrigerator Blood Bank at the community Hospital. Clarendon did sewing for this Hospital. Shawville Branch donated \$10 to the Blood Bank, together with a layette to the Hospital and bedding to the Nurse's Home.

Richmond County.

Richmond Hill held a sale of slips which netted \$30 for the treasury. Mr. Beaudoin, Agronome, was guest speaker at Melbourne Ridge. Maple sugar for the Navy was donated at the meeting. This Branch, and also Spooner Pond held sales of slips and plants. An address by the district Agronome was given at Spooner Pond.

Sherbrooke County.

A "Bring and Buy Sale" netted a good sum for Belvidere Branch. This Branch is holding a vegetable contest for the members which promises to be of interest. Ascot and Belvidere had Mr. W G. Robinson, Agronome, as guest speaker, his subject being increased production of foods. This Branch made plans for the collection of salvage. An address on the habits and control of garden insects was a feature of the meeting of Lennoxville

Branch. A guessing contest on garden seeds followed. Three of the High School girls were given tickets to attend the Musical Festival in Sherbrooke. A very successful salad tea and food sale was held by this Branch, netting over \$20. Magog Branch heard an address by Mrs. Grayson Turner on Agriculture and Industries. A successful plant sale was held.

Stanstead County.

Two members of the Q.W.I. Board were present at Stanstead County annual meeting, Mrs. A. E. Abercrombie, guest speaker, and Miss M. L. Kezar. Tomifobia Branch sponsored a National Film Board showing. Ayer's Cliff had Mr. W. G. Robinson, Agronomer, as guest speaker at an Agricultural meeting. North Stanstead Branch made a real success of serving hot school lunches during the winter, receiving much commendation from sister Branches.

Megantic County.

This County is preparing for a School Fair in the Autumn. A new flag was bought for W.I. use and plans made for a Dominion Day picnic.

Mrs. Smallman, Provincial President, addressed the meeting at Abbotsford. Current events was the subject of a talk by Mrs. Burton.

Pontiac County.

Shawville held a social evening, the proceeds to provide comforts for boys overseas. A discussion on Compulsory Education was conducted by Mr. Tolhurst, Principal of the High School, in which the members took a spirited part. A very interesting paper on bird life was read by Mrs. Robb of Fort Coulonge Branch. Clarendon discussed the Soybean Industry at its meeting, and did sewing for the Community Hospital. A paper on Food Facts was given at Elmside meeting.

Orford Branch had talks on jam and pelly making and discussed the sugar ration and war-time economy.

Democracy Has Not Failed

by Grace A. Kuhring

Politicians with greed for power, aided by malcontents and by enemy agents and supported by unthinking persons who take up any new 'cause' or 'ism', especially if it seems to be sensational and unusual in its aims, have been telling the world for some years that "Democracy has Failed", that "Capitalism has failed", that "Christianity has failed" and that "this is a world of Youth," that "people past middle age are of no further use and should be retired." They had almost convinced some confused people that they were right and, people who should have known better joined them in their attempts to foist these theories upon us.

This war has proved them to be entirely wrong.

Although the Nazis, getting ready for seven years, were thoroughly prepared for total war, our past middle age' Christian Leaders with a Capitalist System in Democracy have been able to wage war successfully in spite of the fact that armies had to be recruited, equipped and trained, the engines and munitions of war manufactured and the very buildings in which the equipment, guns, ammunition, tanks, ships and planes were to be manufactured had first to be erected.

For two of those three years we have also been supplying our ally Russia with planes, tanks, guns and ammunition to carry on her brave fight for freedom.

It has been said that "War is never the end but always the beginning of a new social order."

Hitler in his ambition to bring all the world under his domination has awakened the peoples of the democracies to the fact that freedom is precious and that their freedom is in danger.

In the past we in the democracies have failed properly

to support democracy, Christianity and our Capitalistic System but it is the people who have failed, not our system.

We have allowed our Governments to become less and less democratic. Bureaucrats and Specialists have supplanted the elected members of Parliaments as managers of public affairs.

We have been dwelling too much on what the state owes the individual in benefits and have forgotten the obligation to the state owed by each individual.

We are all capitalists. The farmer who owns his machinery and animals, the worker who owns his own tools, the carpenter, the garage mechanic all are capitalists.

That youth has a very definite place we do not deny. Certainly the tempo of modern active warfare is for the young. But we must not overlook the value of our 'past middle age' leaders. Their broad experience gained through the years has given the wise, far-seeing leadership without which we could not have forged ahead so rapidly.

It is only to be hoped that we will learn the lesson that youth and age need each other. That physical and mental fitness, not years, are what count. That must be guided by the wisdom and experience of age if needless mistakes are to be avoided.

We do not maintain that our democratic system is perfect but we know that it has not failed.

It is our duty to study present and future needs, find the leaders who will put them into practice and then see to it that we give those leaders our loyal support.

If we want Freedom, we must believe in Democracy and as individuals be prepared to assume our full responsibility to make democracy work.

F.W.I.C. Board Meets

The thirteenth biennial meeting of the Board of Directors of the Federated Women's Institutes of Canada, held in Toronto on June 1, 2, 3, discussed among many national problems, labor and food production, public health, education, social security, anti-inflation, and the raising of funds to care for men in the fighting forces.

Mrs. H. A. Dunham, Havelock, N. B., President of the F.W.I.C., who was recently given the distinction of O.B.E. in the King's Birthday List of Honors, in recognition of the services rendered by the Women's Institutes throughout Canada, presided over the meeting. A committee was appointed to arrange for the establishment of a central office for the F.W.I.C. where matters pertaining to the national organization might be handled.

Among those who addressed the Board were the Presidents of all the Provinces so represented, Miss Byrne Hope Sanders, Miss Laura Pepper, Miss Mary A. Clarke.

A new and significant movement was announced in the formation of a Women's Land Army in British Columbia, now ready to commence operations in that Province. This plan is expected to release more men from farm work for the services, while women will carry on in their place.

Past President of the Q.W.I. Promoted to National Leadership



Mrs. Cameron E. Dow, for the past four years President of Quebec Women's Institutes, was appointed to succeed Mrs. H. A. Dunham as President of the Federated Women's Institutes of Canada, at the thirteenth Biennial meeting of the Federated Board held in Toronto on June 1, 2, 3. Congratulations to Mrs. Dow for her well-deserved promotion and confidence in the proven ability to carry out the responsibility of her responsible position go out to her from every Branch in her own Province.

Wartime Canning

Complete and up-to-the-minute directions for home canning of fruits and vegetables and making jams and jellies are contained in "Wartime Canning" which may be obtained free from Publicity and Extension Division, Dominion Department of Agriculture, Ottawa.

A HANDY MEAT COUPON CALCULATOR

The table below shows how much meat (in pounds) can be obtained for from 1 to 10 coupons in any of the four coupon groups.

Number of coupons	A	B	C	D
1	1/2	3/4	1	1 1/4
2	1	1 1/2	2	2 1/2
3	1 1/2	2 1/4	3	3 3/4
4	2	3	4	5
5	2 1/2	3 3/4	5	6 1/4
6	3	4 1/2	6	7 1/2
7	3 1/2	5 1/4	7	8 3/4
8	4	6	8	10
9	4 1/2	6 3/4	9	11 1/4
10	5	7 1/4	10	12 1/2

You may buy less than a full coupon's worth of any meat and take the rest of the coupon value in meat from the same or any other coupon group.

For instance; if you want half a pound of hamburger (worth half a coupon), you can buy, at the same time, 1/4 pound of any Group A meat, or 6 ounces of any Group B meat, or 1/2 pound of any Group C meat or 10 ounces of any Group D meat — giving one coupon to cover both purchases.

Wife: "Don't argue with me."

Hubby: "But I haven't said a word."

Wife: "No, but you were listening in a very unpleasant way."

A Meat Board Replaces the Bacon Board

The Bacon Board which was set up in December, 1939, to control the distribution of bacon and ham to make sure that the amounts of these which were needed for shipment to Britain were available, has had its powers enlarged, and is now known as the Meat Board.

The Meat Board was established because it may be necessary, now that most meat is rationed, to control the distribution of all meat, not only of bacon and ham, and to arrange, through agreements and processing in such a manner as to carry the product from a period of long supply to one of short supply.

The Meat Board will have the responsibility of carrying out all contracts or agreements concerning the export of meat made between Canada and any other government. All licenses and orders that were issued by the Bacon Board remain in effect under the new Meat Board, and the personnel of the new board has not changed. Its members are: Chairman, Hon. J. G. Taggart, Minister of Agriculture for Saskatchewan; L. C. McQuat, General Agricultural Agent for the C.P.R.; S. E. Todd, Managing Director, Packers Council, Toronto; Adrien Morin, Associate Deputy Minister of Agriculture, Quebec. The Secretary-Manager is L. W. Pearsall, Assistant Director, Marketing Service, Ottawa.

PARENTS AND CHILDREN

by Mary Avison

Accepting Reality

Most grown-ups have their pet illusions and evasions, points at which they deny unpleasant facts and try to escape the consequences. I recall one knitter who never would rip and remake an article, no matter how out of proportion her work was. She always justified this by saying "It will stretch", or "When it is washed we can pull it into shape."

We all know people who act as if it took no time to do certain essential things, like dressing or getting from one place to another, and so are always "just a few minutes" late for appointments.

This attitude represents an escape from reality. Such people try to avoid change and difficulty, to find peace and ease by shutting their eyes to the facts.

To know the world as it is, rather than to live in a dream world, idealized and remade according to our own wishful thinking, is the tremendous task we must set ourselves and our children. Unless we learn to deal with the world that is, it will deal with us, peremptorily and unexpectedly. It is possible for a time to ignore reality and to believe that the world of our fantasy exists not only for us but actually. Sooner or later, however, disillusion follows. We bump up against stern, hard, cold facts and are forced to face the shattering of our illusions, to tackle the rebuilding of our ways of thinking and living. The only other alternative is to retreat completely into fantasy and become queer, "mental", perhaps even to develop seriously diseased minds.

"One gains more by understanding life as it is than by living on delusions", says J. J. B. Morgan. "Willingness to face life as it is, is one of the great problems of personality adjustment, and this lesson should be learned in childhood if it is to be learned at all."

Childhood is the time when we should learn not to ignore facts but to face them. In childhood when imagination and reality are confused, children need help to recognize the difference, and the quality of each. In childhood the temptation is strong to evade difficulties by escape into an unreal world of day dreams, romance and good fairies, or an untrue world created by lies. Adults who encourage children to blame "the naughty chair" or "the bad floor that bumped baby" are encouraging a false idea and laying the foundations for escape from facts. Children should rather be helped to understand why they bumped into the chair, why they fell and hit the floor or burned their tongue or pinched their finger, etc. They should be taught how to avoid doing so again. They should be shown how to manage inanimate objects and how to work with, not against, the laws of nature.

The laws and reactions of the world of things are consistent and understandable. Even tiny children (1 year

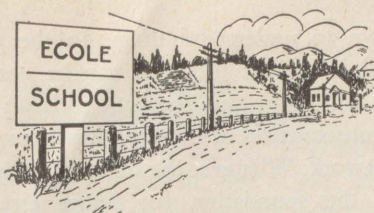
or less) can begin to understand them. In the growing years, they should learn that problems can be dealt with, whether they be illness or punishment, criticism or unfriendliness, the consequences of breaking a window or forgetting their homework. Whatever the difficulty to be faced, escape only lays the foundation for future escapes. In acceptance, understanding, and the experience of successfully dealing with a difficulty lies the way toward mastery over things.

Dealing with people and with social situations is less easy because people's reactions are less consistent. Therefore, it is necessary that we be even more careful to encourage a realistic way of thinking when difficulties involve people. The tendency to blame others for our mistakes is such a ready way of escape and can so easily become a persistent habit. Parents should try to be objective and courageous in judging their own tendency to blame a noisy or distracting child for their own blunders and mistakes. "See! You made me spill the milk", I find myself saying, with just enough truth in this to justify my irritation, yet I know it was not wholly the child's fault. Children readily sense the injustice of the partial truth, but also copy our ways. Later I hear her say to her brother as they romp together: "It was you made me knock it over!" A quiet talk about the real causes of the "accident", an acceptance of responsibility shared, is much more useful than wholesale blame and recrimination. Shared responsibility for clearing up the mess, repairing the damage, apologizing to the owner, replacing the broken article, may also be part of the process of learning to deal realistically with the total experience. Making what amends are possible (within the limits of the child's age), and recognizing that in some cases nothing can make amends, are both necessary things to learn.

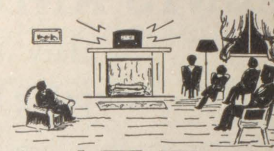
Parents should see that life is neither too difficult for them to cope with nor too easy to escape. The dangers of over-protection are as great as those of over-harsh treatment, and are more prevalent in our generation. If our discipline is too harsh and strict, we drive them into some form of escape. But if we make life too easy for them, we unfit them for dealing with it or for discovering its full satisfactions and joys, since mastery of life and its problems is one of the great satisfactions.

Good Neighbour Potatoes

Canada came to the rescue of American potato growers in flooded-out areas in a fine bit of international co-operation recently. Floods in the Ohio valley washed away large areas of newly-planted potato crops and the call went forth for seed supplies for re-seeding. About 10,000 bags of certified seed potatoes were sent from Canada. They will help to reclaim much of the flooded out potato areas. The Canadian stocks will be replaced in full before July 12 by the American authorities, with new potatoes from the early potato areas across the line.



LIVING AND LEARNING



Quebec Farm Forum Meeting

On June 19th the third annual meeting of representatives of Quebec Farm Forums met at Macdonald College. Farmers and their families travelled from nearly all the districts where Farm Forum groups met last winter. They came from Lennoxville, Howick, Wright, North Hatley, Huntingdon, Sutton, Granby, Bury, Riverfield, Lachute, Fordyce, Campbell's Bay, East Farnham, Gracefield, Tullochgorum, St. Rose de Lima and Wyman. For some people it was their first Farm Forum conference.

The morning was devoted to a message of greeting from Dr. W. H. Brittain and to the annual meeting. The secretary of Quebec Farm Forums, R. Alex Sim, gave his report on the past year's activities, as did the local representatives. Several important resolutions were passed.

Here are the main points covered:

(1) that the National Film Board be asked to produce more films dealing with farming and the work of the farm forums.

(2) that a committee of the Quebec Council of Farm Forums be appointed to consider the question of financing the forums.

(3) that the conference express thanks to Dr. Brittain and to the Canadian Broadcasting Corporation for their

support.

(4) that local and farm papers be urged to give more publicity to Farm Radio Forum.

(5) that there should be more representation of farmers on government boards.

A picnic lunch was held on the campus, during which the forum members divided into special discussion groups.

A panel discussion on Future Policy was held in the early afternoon. Those participating were M. Frank Sheffrin, Dominion Department of Agriculture, Mr. J. M. Winter, Ormstown, Mr. Leonard Harman, of National Farm Radio Forum, Mrs. Donald McElrea, Lennoxville, Mr. Gordon Shufelt, East Farnham, and Mr. R. Alex Sim, who acted as chairman. A lively discussion took place, with many persons from the audience taking part.

Dr. E. A. Corbett, Director of the Canadian Association for Adult Education then addressed the delegates. A meeting of the Quebec Council of Farm Forums followed. Election of officers took place, with Mr. P. D. MacArthur of Howick being unanimously re-elected as president.

A tour of Macdonald College brought a very successful day to a close.

NATIONAL FARM RADIO FORUM 1942-43

	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B. & N.S.	P.E.I.	Canada
Number of Forums registered.....	169	96	106	86	538	83	77	26	1,180
Number of people in registered Forums.....	1,200	772	1,838	1,216	10,000	1,035	980	285	17,326
Number of Forums which have sent in one report or more.....	20	63	78	93	478	75	87	26	920
Total number of people in Forums which have reported.....	200	576	1,353	925	8,000	928	1,091	285	13,358



Farm Forum Conference, Macdonald College, June 19, 1943.

WHY FARM FORUMS

Many excellent letters were received in the contest held some time ago on "Why Farm Forums." Extracts from these were printed in the last issue of the Journal. The judges, Dr. W. H. Brittain, Professor Lionel Hamilton, and Mr. Harry Avison, had a hard time picking the best letter. It was finally decided that the winner of the book prize should be Mr. Murray Mason, of the Fordyce Farm Forum.

Here is Mr. Mason's letter:

"When the Farm Forum comes up for discussion in the community, one question is sure to arise: 'Where is it headed for, what will it do for the farmer, what will it do for me? The man who is thinking along broader lines may carry the question a step further: 'What will the Forums do for the country as a whole?'"

Recently when I suggested to a member that she write a letter on the above subject she replied: "How are we supposed to know what the Forums are going to do? That is for Alex Sim and the other leaders to tell us!"

I quote this example to show the need for a clear realization by the rank and file members of the Forums along the lines that it is they who will cause the movement to fail or succeed. We are a democracy; it is for us to map our own course—and to follow it.

Let us look at the individual Forum in the rural community. First there is the social aspect. A group of neighbours meeting together once a week get to know each other as never before. A better community spirit develops. We discover that Johnny Young, whom we had always thought a little backward, has some very constructive suggestions to offer. Henry Taylor, whom we had suspected felt a little "superior", proves to have just the same problems as the rest of us. And it is amazing how a game or sing song helps us to relax together!

Then there is the exchange of useful information in the general conversation. Helpful hints on production, repairs, etc. creep in. Bill knows where Joe can get a second hand part for his binder; Tom has a better way of getting his eggs to market.

A well-conducted discussion on the subject outlined for the evening is a liberal training to the individual in consecutive, logical thought, and in expressing himself clearly and concisely to the group following this discussion. True, after we have sent in our findings we may not seem to be any nearer the solution—forming a credit union, establishing a county medical service, or organizing a cooperative, yet the discussion has not failed to start us thinking. And if at some future date such a project is introduced we will be in a position to take a logical and constructive attitude toward it.

And what of the Farm Forum as a national union throughout the Dominion? The possibilities of the whole agricultural clan, of the influences of their carefully thought out, collective opinion on subjects of vital interest, of cooperative enterprises growing out of the Forums, staggers the imagination.

All that has been accomplished by the cooperatives of Denmark for instance, we can achieve here on a vastly larger scale. Why not a planned agriculture with each section of the country producing the products for which it is best suited, in proper quantities to supply the markets, and for a fair and controlled price?

It has often been said that a strong and contented peasantry is the backbone of any nation. **National Farm Forum**, and that which may grow out of it can, if we "all pull together through the stormy weather" give Canada a farming personnel satisfied with the sense of a big job well done and receiving in return a fair share of security and all that goes to make life worth while.

Yes, all this is looking far ahead, but it need not be an empty dream. Let's one and all exert ourselves to win new members, organize new Forums, and above all get together, pull together and stay together."

Runner up in the contest was Mrs. Louise Young, of Foster. Most of her contribution to the contest has been published, but here is a letter she wrote on another occasion on what the Farm Forums have done in her community.

"Here are a few things done—One Member stayed with a baby while the mother went into town to see a doctor.

Another went to a neighbour's house to help wash dinner dishes, as a gang of men were putting in ice and there was much extra work—the husband running a milk route.

Another member went, and still goes, to a neighbour's house every day to get down hay for the cow, shovel snow, and do odd jobs for a woman whose husband has to go to another town to earn a living for his family.

Another member took a party in his truck to a "500" at the Creek School house for the benefit of the Red Cross. They couldn't have got there otherwise.

When I asked one member what it was she did, and I know she did something as she told me at the time—she could not remember what it was. Perhaps this is characteristic of all the deeds done in the course of everyday life and soon forgotten by the doer."

Babson Sees Great Co-op Growth

Analyst Roger Babson, predicts a rapid growth of co-operative production and distribution. His news letter for April 26 contains this forecast: "Co-operative production and distribution continue to grow even under our war-restricted economy. Look for rapid development of co-operatives after the war along lines that may bring producer and consumer closer together."



THE COLLEGE PAGE

A Serious Teacher Shortage

An anticipated shortage of at least one hundred teachers next September in the Protestant rural schools of the province, and the problem of staffing many schools adequately, both in urban and rural centres, formed the main theme of the address delivered by the Director of Protestant Education, Dr. W. P. Percival, to the graduating students of the School for Teachers assembled in Moyse Hall, for their closing exercises on June 10th.

"We need teachers to stay in the profession during the war. Without them, schools must close. That is the bald fact," he stated. "So great is the shortage that any teacher who resigns at this time leaves a classroom vacant, and anywhere from ten to forty pupils without a teacher. This is particularly true in the rural districts, but the shortage is so great that it may apply even in urban centres."

These observations of Dr. Percival were underlined by the fact that the class he was addressing was the smallest group to receive certificates in the past fifty years of teacher-training in the province, and possibly the smallest class since such training began, on the Protestant side, in Quebec. Only forty-two students (four of them men) received permission to teach in elementary and intermediate grades, and of these, four will have to complete certain requirements before receiving certificates. In addition to these students, twelve graduates from the McGill Department of Education received first class high school teaching certificates, one woman received a Kindergarten Director's

certificate, two received Kindergarten Assistant certificates, and one a Household Science specialist teaching certificate.

The number of empty classrooms and closed schools would be still greater were it not for the fact that many married women have returned temporarily to the profession, and the Department of Education has shown its willingness to grant teaching permits when school boards are unable to find qualified teachers. Dr. Percival was careful to point out, however, that these uncertified teachers have no status that will relieve them of the necessity of taking the required professional courses if they wish to continue teaching after the war. He also emphasized that standards of admission to the School for Teachers, which were raised last year, would not be lowered because of the present emergency.

Dean Sinclair Laird, in his annual report on the work of the School for Teachers, commented on the superior qualifications of this year's classes as a result of the requirement of an additional year of academic preparation. He, too, deplored the dearth of trained teachers, holding that such a condition was likely to prevail "until, through the co-operation of the Provincial Government and the School Boards, especially in the rural districts, salaries are greatly increased to attract a desirable type of candidate to the teaching profession."

Compulsory education, which goes into effect in this province with the re-opening of the schools next September, will add considerably to the problem of teacher shortage and its concomitant, inadequate financial support. Friends of education in Quebec, however, are counting heavily on the active support of Premier Godbout, who expressed himself during the debate on the compulsory education bill as favouring a reduction of expenditures in every department — "even in agriculture" rather than permit the progress of the schools to be retarded.

J. M. PATON.

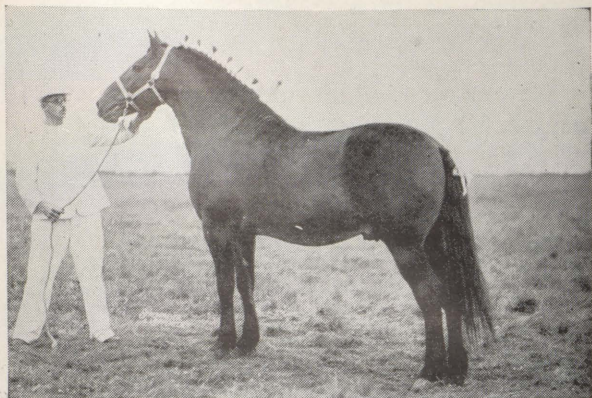


Intermediate and Elementary classes, School for Teachers, 1942-43.

Lewis McKay, B.Sc.(Agr.) 1940, has been appointed agricultural representative for the county of Albert, and the English-speaking sections of Westmoreland County in Nova Scotia. McKay specialized in animal husbandry while at Macdonald College and was winner of the Stern Cup for stock judging in his final year. After graduating he worked at the C.E.F. at Ottawa for a time on beef and sheep experimental work, then went to New Brunswick where he did extension work in Charlotte County.

In his new job he takes the position formerly held by R. D. Gilbert, B.Sc.(Agr.) 1935, who is now with National Selective Service.

Canadian Cattle and Canadian Horses *are making a big contribution on Quebec farms*



It has been proved many times — native horses are still the best. They are hardy, are well adjusted to our climate, have more endurance and breed better. Nothing is better suited to the needs of the average farmer than a team of 1200 to 1400 pound Canadian horses.



Farmers: A herd of Canadian cows will bring prosperity. They are gentle, well adopted, require the minimum of care and will produce butterfat more cheaply than any other breed.

For information write to

**THE SECRETARY, CANADIAN HORSE AND CATTLE BREEDERS' ASSOCIATION,
DEPARTMENT OF AGRICULTURE, QUEBEC, P.Q.**

SUBSCRIPTION FORM

Please send the Macdonald College Journal for two years to

Name

Print name and address clearly

Address

The Subscription Fee of \$1.00 for 2 years is enclosed.

(The price for a 1 year subscription is 50c)

FILL OUT THIS FORM AND MAIL IT WITH YOUR SUBSCRIPTION TO:

THE MACDONALD COLLEGE JOURNAL

MACDONALD COLLEGE, QUEBEC

EASTERN FARMERS!

WESTERN FEED GRAINS

Wheat-Barley-Oats

Should Be Ordered Early!

Over-burdened transportation facilities—transcontinental and local—and limited public storage cannot be relied upon to handle on short notice all the feed grains which will be needed to maintain Eastern Canada's live stock production next winter. As the season advances the problem will become more acute. Farmers who will need to buy feed grains to carry out their live stock production plans can protect themselves by

- 1. Placing orders NOW.**
- 2. Taking delivery of whole grains as available and storing them on the farm.**

The Dominion Government will continue the policy of freight assistance and feed wheat payments now in effect.

Stable prices for oats and barley are assured through the maintenance of the price ceilings now in effect.

AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa

Honourable James G. Gardiner, Minister